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ABSTRACT

Data from the 1992 National Adult Literacy Survey were analyzed in a study of the relationship between literacy skill levels and dependency on welfare. The study focused on the following: literacy levels in the welfare population and in different demographic groups, the relationship between educational attainment and literacy and labor force experience and literacy, and the effectiveness of selected strategies for raising literacy levels. Among the major findings were the following: (1) on a 5-point scale, from over a third to almost a half of all welfare recipients perform at the lowest literacy level and approximately one-third perform at the second lowest level; (2) the average literacy level of welfare recipients is below that of unskilled laborers and assemblers; (3) sex differences in average document and quantitative proficiency found in general population are reduced or eliminated in welfare populations; (4) the performance gap between Whites and Blacks and between Whites and Hispanics is smaller within welfare populations than within the national population; (5) as in the general population, employed welfare recipients with higher literacy levels earn higher wages than their less literate counterparts; and (6) controlled research studies have demonstrated that education and training can help raise welfare recipients' literacy levels. (Sixty-four tables/figures are included.) (MN)

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LITERACY and DEPENDENCY:

ED 385 775

Y INFORMATION REPORT

The Literacy Skills of Welfare Recipients in the United States

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CONTENTS

Acknowledgments 2
Preface 2
In Brief 3
Summary and Highlights 4
- Literacy in the welfare population 4
- Literacy in different groups 4
- Education and literacy 5
- Labor force experience and literacy 6
- Raising literacy levels 7
- In conclusion 8

Introduction 9
- Measuring literacy 9
- How many are on welfare? 10
- About this report 12

Part I: Literacy in the Welfare Population 14
- Average literacy proficiencies 14
- Levels of literacy 15
- The welfare status of adults in each literacy level 31
- Comparing self-assessed and demonstrated literacy proficiencies 32
- Summary 33

Part II: Literacy in Different Groups 34
- Sex 34
- Marital status 35
- Age 36
- Race/ethnicity 37
- Country of birth 38
- Health status 39
- Summary 40

Part III: Education and Literacy 42
- Highest level of education 42
- Pursuit of a GED or high school equivalency 43
- Enrollment in a basic skills program 44
- Enrollment in school or college 45
- Reading practices 45
- Summary 47

Part IV: Labor Force Experience and Literacy 48
- Labor force status 48
- Number of weeks worked 49
- Occupation 50
- Weekly wages 51
- Annual household income 52
- Summary 53

Part V: Raising Literacy Levels 55
- Basic education 55
- School attendance, by sticks and carrots 56
- Teaching in context 57
- Other efforts 58
- Summary 58

In Conclusion 60

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PREFACE

The existence of welfare dependency is the result of a multitude of factors woven into the fabric of our society and economy. Having, or lacking, literacy skills is one of those factors. And it is a factor that was largely neglected in the programs created during the last few decades to help people become independent and leave welfare, at least until the 1988 federal legislation that created the Job Opportunities and Basic Skills (JOBS) program.

This report explores the literacy dimensions of dependency, using previously unpublished data from the 1992 National Adult Literacy Survey and experimental program research on raising skills through literacy training and basic education.

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IN BRIEF

The 1992 National Adult Literacy Survey* enables us to take a close look at the literacy skills of adults age 16 and over who received Aid to Families with Dependent Children (AFDC), other public assistance, or food stamps during the 12 months prior to the study. Using print material of the kind encountered in workplaces and daily life, the assessment establishes that critical literacy skills are weak in a very large proportion of the welfare population.

Specifically, on a scale of 1 to 5, where 1 is the lowest literacy level, almost half the welfare recipients performed in Level 1. Individuals who perform at this level are unlikely to be successful at such tasks as interpreting instructions from an appliance warranty, locating an intersection on a street map, identifying and entering background information on an application for a Social Security card, or calculating the total costs of a purchase from an order form.

Another one-third of the welfare recipients performed in Level 2. Thus, three out of four welfare recipients cannot consistently perform Level 3 tasks such as writing a letter to explain a billing error, entering information into an automobile maintenance form, or calculating miles per gallon using information given on a mileage record chart.

In an economic world that demands such literacy skills in the typical workplace, the great majority of those who become dependent on welfare are handicapped in the employment world and may not succeed in training programs designed to prepare them for employment. The average literacy level of welfare recipients is below that of unskilled laborers and assemblers. By no means did all welfare recipients demonstrate limited literacy skills, and many people with limited skills do, in fact, hold down jobs. But their earnings may not keep them out of poverty, and their employment future is precarious in a changing economy that increasingly demands basic skills, or better.

The data in this report show that, in the adult population as a whole, the likelihood of being on welfare goes up as literacy levels go down; the two are intertwined. In the general population, the higher the literacy levels, the greater the number of weeks worked during the year, the higher the average weekly wage, and the higher the annual income. *The same pattern holds true in the welfare population.* However, wages and earnings do not tend to rise as much for welfare recipients as for adults in the general population.

What of the prospects of raising the literacy levels of welfare recipients? Might this lead to greater employment, earnings, and independence? While literacy and basic education was neglected in decades of welfare reform efforts, it was emphasized in the Job Opportunities and Basic Skills (JOBS) program enacted by Congress in 1988. Limited research is available on the results, but what we do know gives some reason for optimism. Interventions aimed at raising literacy and promoting basic education can, in fact, enroll large numbers of welfare recipients, and those programs that have been carefully planned to serve welfare recipients can raise measured literacy levels. Some programs have also succeeded in increasing recipients' earnings, although it is hard to determine what particular program characteristics contributed to these gains. A particularly promising approach is to integrate education and job skill training—providing education in context, such as in the successful programs of the Center for Employment Training.

Welfare dependency is complex, and literacy is just one factor in the equation. But it is an important factor, and the data provided in this report strongly establish that our efforts to reduce dependency will be imperiled if we ignore it.

from over a third to

*Mandated by Congress, funded by the National Center for Education Statistics, and carried out by Educational Testing Service.

SUMMARY AND HIGHLIGHTS

In 1992, Educational Testing Service conducted a national assessment of adult literacy for the United States Department of Education's National Center for Education Statistics. The National Adult Literacy Survey was administered to a nationally representative sample of nearly 27,000 adults age 16 and older, who were asked to perform a variety of literacy tasks and to answer questions about themselves, including whether they or anyone in their family had received Aid to Families with Dependent Children (AFDC) or food stamps in the preceding year. These questions provided the foundation for this report, which analyzes the prose, document, and quantitative literacy skills of adults who received welfare assistance in comparison with the literacy skills of the adult population as a whole.* The report also summarizes the results of related research on efforts to raise the literacy levels of the welfare population.

LITERACY IN THE WELFARE POPULATION

- On average, the literacy skills of adults who received AFDC or public assistance and adults who received food stamps were much more limited than those of adults in the general population.**
- More than one-third of the adults who reported that they or their families had received AFDC, public assistance, or food stamps in the year before the survey performed in the lowest level of prose, document, and quantitative literacy defined in the survey (Level 1).
- Another one-third of the welfare recipients performed in the second lowest level of prose, document, and quantitative literacy (Level 2).
- When the percentages of adults who performed in Levels 1 and 2 are combined, between two-thirds and three-quarters of those who had received AFDC, public assistance, or food stamps in the year preceding the survey scored in the two lowest literacy levels on each literacy scale, compared with about half the adults in the general population.
- Not all welfare recipients demonstrated limited literacy skills. On each literacy scale, between one-quarter and one-third of the welfare recipients performed in Level 3 or higher. Yet, just 5 to 7 percent attained the two highest levels on each scale.
- Adults in the total population who performed in Level 1 were disproportionately likely to report that they or someone in their family had received AFDC, public assistance, or food stamps in the 12 months before the survey, and those in Levels 4 and 5 were disproportionately likely to report that they had not received such support.
- In general, welfare recipients were less likely than adults in the total population to describe themselves as reading English well or very well.
- Adults who described themselves as not reading English well (or at all) did, in fact, display far more limited prose skills than those who said they read well or very well. This pattern is found in the welfare populations as well as in the total population.

LITERACY IN DIFFERENT GROUPS

- Two-thirds of the food stamps recipients and 71 percent of the AFDC or public assistance recipients were female.
- Female recipients of AFDC or public assistance outperformed their male counterparts, as well as male and female food stamps recipients. Sex differences in average document and quantitative proficiency that are found

*The assessment results are reported on three proficiency scales, each ranging from 0 to 500: a prose literacy scale, a document literacy scale, and a quantitative literacy scale. Each scale is divided into five proficiency levels, ranging from Level 1 (the lowest) to Level 5 (the highest).

**Throughout this report, when the characteristics and literacy skills of welfare recipients are compared with those of adults in the general population (also referred to as the national or total population), the latter population includes both adults who reported receiving welfare and those who did not.

in the general population are reduced or eliminated in the welfare populations.

- While the literacy skills of married and unmarried AFDC recipients were comparable, married food stamps recipients tended to display stronger quantitative skills than their unmarried counterparts displayed. On all three literacy scales, unmarried food stamps recipients displayed weaker skills than any of the other groups examined.

- The AFDC program serves families with dependent children; thus it is not surprising to find that welfare recipients tend to be younger than adults in the population as a whole. For example, approximately one-third of the AFDC or public assistance recipients and slightly more than one-quarter of the food stamps recipients were age 24 or younger. On the other hand, just 5 percent of AFDC or public assistance recipients and 10 percent of food stamps recipients were age 65 or older.

- In the general population, average prose and quantitative proficiencies rise from the youngest age group (age 16 to 18) to the 40 to 54 age group, then fall steadily across the older groups. The literacy skills of welfare recipients peak earlier, then decline across the middle and older age groups.

- White adults were underrepresented in the welfare populations, while Black and Hispanic adults were overrepresented. About half the AFDC or public assistance recipients and slightly less than half the food stamps recipients were White, however.

- The size of the performance gap between White and Black adults, and between White and Hispanic adults, is smaller within the welfare populations than within the national population. On average, however, White welfare recipients displayed stronger literacy skills than those shown by Black recipients, whose literacy skills were stronger than those of Hispanic recipients. White welfare recipients performed better in the assessment, on average, than Black adults in the total population, and Black welfare recipients performed better than Hispanic adults in the total population.

- About 10 percent of the adults on welfare, and an equivalent percentage of adults in the total population, reported that they were born outside the United States.

- Not surprisingly, native-born adults displayed stronger literacy skills in English, on average, than adults who were born in other countries.

- One out of every five food stamps recipients reported having a physical or mental health condition that keeps them from participating fully in work, school, housework, or other activities. Lower percentages of AFDC or public assistance recipients (14 percent) and adults in the general population (12 percent) reported such conditions.

- Adults with limiting physical or mental conditions were far more likely than those without such conditions to perform in the lowest literacy level in the survey. On the prose scale, for example, nearly half the AFDC or public assistance recipients and 57 percent of the food stamps recipients with limiting health conditions scored in Level 1.

EDUCATION AND LITERACY

- Approximately half the food stamps recipients and 45 percent of the AFDC or public assistance recipients had not graduated from high school, nearly twice the percentage of school dropouts nationwide. Welfare recipients were about twice as likely as adults in the general population to have earned a General Educational Development (GED) certificate, but they were far less likely to have

completed any post-secondary education.

- Adults with higher levels of education performed better in the literacy assessment, on average, than adults with less education. In particular, the literacy skills of welfare recipients who had graduated from high school or obtained a GED were much stronger than those of their counterparts who had not done so. Adults in the general population outperformed welfare recipients with comparable levels of education.

- In the welfare populations, as in the general population, school dropouts who had not studied for a GED or high school equivalency had average prose scores in the Level 1 range, while those who had done so scored in the Level 2 range.

- Sixteen percent of the AFDC or public assistance recipients and 14 percent of the food stamps recipients reported that they had enrolled in a program to improve their reading, writing, and arithmetic skills.

- Welfare recipients who had enrolled in basic skills programs performed as well in the assessment as those who had not, but the survey results cannot tell us how the skills of the two groups compared before the program interventions occurred.

- AFDC or public assistance recipients (13 percent) were slightly more likely than food stamps recipients (10 percent) and adults in the general population (11 percent) to have been enrolled in school or college at the time of the survey.

- Welfare recipients who were enrolled in school or college had higher average literacy proficiencies than those who were not. Still, these students in the welfare population did not perform as well as students in the general population.

- AFDC, public assistance, and food stamps recipients were less likely than those in the general population to read a newspaper every day or at least once a week (56 to 58 percent, compared with 73 percent), and they were twice as likely to say that they never read a newspaper (11 to 12 percent, compared with 6 percent).

- In the welfare populations, as in the total population, the average literacy proficiencies of adults who reportedly read a newspaper every day were considerably higher, on average, than those of adults who never read a newspaper.

LABOR FORCE EXPERIENCE AND LITERACY

- Adults on welfare were less than half as likely as adults in the general population to have been employed full time the week before the survey (21 to 23 percent, compared with 48 percent, respectively). Further, they were far more likely to have been unemployed (22 to 24 percent) or out of the labor force (44 percent).

- Welfare recipients who were active in the labor force performed better in the assessment, on average, than those who were not. On average, the literacy skills of AFDC, public assistance, and food stamps recipients who were out of the labor force were more limited than those of their counterparts in the general population.

- AFDC, public assistance, and food stamps recipients said they had worked only about 16 weeks (or four months) during the year before the survey, on average, while adults nationwide had worked an average of about 30 weeks.

- In the welfare populations, as in the general population, adults with higher levels of literacy proficiency tended to have worked more weeks in the year before the survey than had those with lower levels of proficiency. For example, food stamps recipients in Level 1 on the prose scale had worked an average of just 11 weeks in the preceding year, compared with 29 weeks for those in Level 4. Still, the average number of weeks worked by welfare recipients in the upper levels was considerably lower than that of their

counterparts in the general population.

- Welfare recipients were less likely than adults in the general population to report that their current or most recent occupation was professional or managerial and more likely to report that it was in the crafts or services, or in labor or assembly.

- Just as in the general population, welfare recipients whose current or most recent occupation was professional or managerial outperformed welfare recipients in sales or clerical occupations, who in turn outperformed recipients in craft or service occupations, who in turn outperformed recipients in labor or assembly jobs. The average literacy proficiencies of adults on welfare were lower than those of adults in the general population who were employed in the same occupations.

- The median weekly wage of employed AFDC or public assistance recipients was $184 and that of employed food stamps recipients was $180, while that of workers nationwide was $333 —almost two times higher.

- Welfare recipients who performed in Level 3 or 4 reported higher weekly wages for the week before the survey, on average, than did those in Level 1 or 2. However, even welfare recipients who performed in Level 4 earned less than adults in the general population who performed in Level 1.

- Welfare recipients had a median annual household income of roughly $10,000 the year before the survey, or less than $900 per month. In contrast, the median income of adults in the general population was nearly $31,000, or about $2,600 per month.

- As in the general population, welfare recipients with higher literacy proficiencies have a substantial economic advantage over those with lower proficiencies. Between Level 1 and Level 4, the average annual household income of AFDC or public assistance recipients almost doubles, for example. This rate of increase is smaller than that found in the general population, however. Thus, higher literacy levels appear to have a smaller payoff in the welfare populations than in the general population.

RAISING LITERACY LEVELS

A number of controlled research studies have sought to determine whether the literacy levels of people receiving welfare can be raised through various program interventions and whether (or to what extent) these interventions affect participants' income and reliance on welfare. Several of these research efforts are summarized in the last section of this report. Our conclusions, based on the available research, are as follows:

- Education and training can play a positive role in raising the literacy levels of welfare recipients, but this outcome is not easy to achieve.

- There is considerable promise in the integration of literacy instruction and training, as seen in the Army's functional literacy program and the Center for Employment Training program.

- Opportunities and requirements to participate in basic education programs can result in large enrollments of welfare recipients in such programs.

- Literacy and education programs sometimes increase the measured literacy proficiencies of welfare recipients, compared with those of recipients in control groups.

- Some types of programs succeed in increasing the numbers of welfare recipients who earn GED certificates.

- Among welfare recipients who participate in education or literacy training, higher literacy proficiencies may or may not lead to higher earnings.

- The quality of the educational programs provided to welfare recipients is likely to vary considerably, particularly depending on whether the programs are tailored to meet recipients' needs.

- Education is typically only one element in a package of programs and services needed by welfare recipients.

- Assigning welfare recipients to existing adult basic education programs appears to have little measurable effect on raising their literacy proficiencies.

- Increasing the incomes of welfare recipients is likely to require job development and placement, child care, and other services in addition to education and literacy training. It is difficult to identify the separate impacts of these various program components.

IN CONCLUSION

- *Low literacy proficiencies are widespread in the welfare population.* About three of every four AFDC, public assistance, and food stamps recipients performed in the two lowest levels of literacy defined in the National Adult Literacy Survey.

- *Levels of literacy and degrees of success in the labor market are clearly and closely linked.* This is true in the general population, and it is true among those on welfare: adults with higher levels of literacy are likely to work more weeks during the year and, when working, are likely to earn higher weekly wages. Even more importantly, as levels of literacy increase, the percentage of adults on welfare declines.

- *Welfare dependency can be reduced in two ways: by increasing literacy levels in the general population to reduce the risk of falling into dependency, and by raising the literacy levels of those already on welfare to help them become more financially self-sufficient.* Literacy plays a large role in the risk of becoming dependent as well as in the capacity to regain independence.

- *Not just any literacy or education program will succeed in raising welfare recipients' literacy skills or improving their employment or economic prospects.* This is clear from the experimental research summarized later in this report.

The future of efforts to raise the basic education of welfare recipients remains uncertain. As we write this report, a new welfare reform bill that would end the JOBS program as a federal entity and give states discretionary power over how they will spend "block grants" is moving through the Congress. Still, the JOBS program remains in place in most states, and governors and state legislatures can continue to build on its promising beginnings, whatever the outcome of current legislative efforts.

Clearly we have far to go to reach our goal of helping all welfare recipients strengthen their literacy skills, find new or better jobs, and become financially self-sufficient. We hope that this report will help guide those who are pursuing these crucial objectives.

INTRODUCTION

This report is about the literacy of adults on welfare—principally those receiving Aid to Families with Dependent Children (AFDC) and food stamps, but also those receiving other types of state or local public assistance. It presents new analyses of data from the National Adult Literacy Survey, a large-scale study mandated by Congress and conducted by the National Center for Education Statistics through a contract with Educational Testing Service. The survey was administered during the first eight months of 1992, when trained interviewers gathered information from nearly 27,000 respondents in homes and prisons across the country. *Adult Literacy in America*, written by Irwin S. Kirsch, Ann Jungeblut, Lynn Jenkins, and Andrew Kolstad, is the first report from the survey.

Adults who participated in the National Adult Literacy Survey were asked to perform a variety of literacy tasks and to answer numerous questions about themselves, including whether they had received AFDC or public assistance or whether they had received food stamps in the year before the survey. This makes it possible to identify and analyze the literacy skills of the welfare population, as we have done in this report. Not only can we determine the literacy levels and characteristics of the population of adults receiving welfare, we can also see how their literacy levels and characteristics differ from those of the adult population as a whole.*

MEASURING LITERACY

To analyze the literacy skills of welfare recipients, or of any group, it is first necessary to define what is meant by "literacy." The term is often used as the opposite of illiteracy, which is typically interpreted to mean that a person cannot read at all, cannot decode the printed word, and cannot comprehend what is written. But literacy has a much richer and deeper meaning than that. Its dictionary definitions range from being able to read and write to being a well-informed, educated person and to being familiar with literature.

The National Adult Literacy Survey was guided by the following definition of literacy, adopted by a broadly representative group of experts:

> *Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.*

This definition captures the multifaceted nature of literacy. Literacy is not a single skill, such as reading. Rather, it involves an ordered set of skills that are necessary for accomplishing various tasks in various contexts. Searching for a piece of information in a newspaper, balancing a checkbook, looking up a departure time in a train schedule, and understanding a passage from a novel—each of these tasks calls for different types of literacy skills. Accordingly, the survey focused on three areas of literacy proficiency:

Prose literacy— The knowledge and skills needed to understand and use information from texts that include editorials, news stories, poems, and fiction; for example, finding a piece of information in a newspaper article, interpreting instructions from a warranty, inferring a theme from a poem, or contrasting views expressed in an editorial.

Document literacy— The knowledge and skills required to locate and use information contained in materials that include job applications, payroll forms, transportation schedules, maps, tables, and graphs; for example, locating a particular intersection on a street map, using a schedule to choose the appropriate bus, or entering information on an application form.

Quantitative literacy— The knowledge and skills required to apply arithmetic operations, either alone or sequentially, using

*Throughout this report, the characteristics and literacy skills of welfare recipients are compared with those of adults in the general population (also referred to as the national or total population). The latter population includes both adults who reported receiving welfare and those who did not.

numbers embedded in printed materials; for example, balancing a checkbook, figuring out a tip, completing an order form, or determining the amount of interest from a loan advertisement.

The assessment consisted of an array of prose, document, and quantitative literacy tasks that simulated real-life situations encountered at home, at work, and in the community. The tasks required participants to generate their own responses, rather than choose an answer from a set of options. To ensure the broadest possible coverage of prose, document, and quantitative literacy, a large number of tasks (166 in all) were administered in the assessment, requiring a variety of information-processing skills and strategies.

For purposes of efficiency, each survey participant responded to a subset of the tasks that, were compiled into booklets that took about 45 minutes to complete. Participants also spent about 20 minutes answering a series of background questions. Their responses to these questions make it possible to analyze the relationships between literacy and characteristics such as race/ethnicity, age, educational attainment, labor market experiences, and reading practices.

One way to present the survey results would be to describe how the survey population performed on each of the 166 tasks. This would place an enormous burden on the reader, however, making it difficult to conclude what the state of literacy is for the adult population as a whole and for various subgroups of the population. Statistical methods were therefore used to construct proficiency scales based on respondents' performance on the literacy tasks—scales similar to those used in reporting the results of the Scholastic Assessment Tests (SAT).

Based on their performance on the literacy tasks, respondents were assigned scores on the three proficiency scales, each ranging from 0 to 500. Each literacy task was also assigned a score that reflected its difficulty. Using the literacy scales to report on both individual proficiency and task difficulty makes it possible to identify the types of literacy tasks that are likely (or unlikely) to be performed successfully by individuals with varying levels of literacy.

While most previous studies of literacy have attempted to identify the number of so-called "illiterates," the goal of the National Adult Literacy Survey—to profile the population's literacy skills—was different. Thus, there is no single point on the prose, document, or quantitative literacy scale that separates "illiterates" from "literates." Rather, each scale is divided into five levels of proficiency, each encompassing a range of scores.

Level 1 (0 to 225)
Level 2 (226 to 275)
Level 3 (276 to 325)
Level 4 (326 to 375)
Level 5 (376 to 500).

The individuals who performed in Level 1 demonstrated the lowest literacy proficiencies, while those in Level 5 displayed the highest proficiencies. Similarly, the tasks that characterize Level 1 are the least challenging in the assessment, while those associated with Level 5 are the most difficult.

Adults who score within a given literacy level have a high probability of performing the tasks at that level successfully, but a lower likelihood of success on tasks at the levels above theirs.* In other words, adults who score in Level 1—that is, those with literacy scores between 0 and 225—are likely to perform the Level 1 tasks successfully, but are likely to have more difficulty with tasks in Level 2 and even more difficulty with tasks in Levels 3 through 5. Similarly, adults who score in Level 3 are likely to succeed with Level 1, Level 2, and Level 3 tasks but are likely to find the Level 4 and 5 tasks quite challenging. Adults in the highest level displayed the ability to perform the full array of literacy tasks in the assessment.

HOW MANY ARE ON WELFARE?

Just as estimates of the size of the literacy problem in this country vary according to which definition of literacy is used, so do estimates of the size of the welfare

*In this survey, a high probability is defined as at least 80 percent of the time.

population vary. Some surveys count the number of recipients at a single point in time, for example, while others (such as this one) focus on the number of recipients over some specified period.

As noted earlier, adults who participated in the National Adult Literacy Survey were asked to indicate whether, in the 12 months before the survey, they or anyone in their family had received AFDC, public assistance, or public welfare payments from the state or local welfare office; or food stamps.* In this report, adults whose families had received these types of welfare support are categorized as AFDC or public assistance recipients and as food stamps recipients, respectively. It is important to note, however, that some of these adults were on welfare for only part of the year and not all were on welfare at the time of the survey.

Slightly more than 2,000 of the 26,000 participants in the National Adult Literacy Survey reported that they or someone in their family had received AFDC, public assistance, or state or local welfare payments in the 12 months preceding the survey (Table 1). In population terms, this means that an estimated 12 million of the 191.3 million adults in the United States in 1992, or about 6 percent of the adult population, were in families that had received AFDC or public assistance during this period of time.

Food stamps recipients were more prevalent than AFDC or public assistance recipients. Three thousand survey participants reported that they or someone in their family had received food stamps in the 12 months before the survey, representing nearly 18 million adults or an estimated 9 percent of the adult population nationwide.

These self-reported data from the National Adult Literacy Survey are different from administrative statistics from the U.S. Department of Health and Human Services. According to those figures, in 1992 there were approximately 5 million families and 14 million individuals (adults and children) on AFDC, and 24 million food stamps recipients. There are numerous reasons for these differences between National Adult Literacy Survey and government statistics. For example, literacy survey participants who did not receive welfare support themselves but who lived with a family member who did were classified as recipients for the purposes of these analyses. Further, the numbers of AFDC or public assistance recipients estimated by the literacy survey probably include individuals who were receiving general assistance (nearly 1 million individuals in 1992, according to government statistics). There are other differences, as well, in the ways in which these separate surveys count the number of welfare recipients.

This raises an important point. Although the National Adult Literacy Survey results can be used to estimate the number of AFDC or public assistance recipients and the number of food stamps recipients in the United States, the study was not designed to provide precise statistics on the size of the welfare population. This task is best accomplished using administrative data collected by states and the U.S. Department of Health and Human Services. We report the estimated numbers and characteris-

Table 1
Estimated numbers and percentages of adults in 1992 who had received AFDC or food stamps in the year preceding the survey, based on the National Adult Literacy Survey

Type of welfare received	Number of adults surveyed	Number of adults nationwide	Percentage of adults nationwide
AFDC/public assistance	2,070	11,995,000	6%
Food stamps	3,001	17,953,000	9%

Source: *National Adult Literacy Survey, 1992.*

*Respondents were instructed to consider as family anyone who lives in their household and who is related to them by blood, marriage, or adoption.

tics of welfare recipients based on the National Adult Literacy Survey data, but our primary interest is in recipients' literacy skills and in characteristics and experiences associated with literacy—information that is not available from any other source.

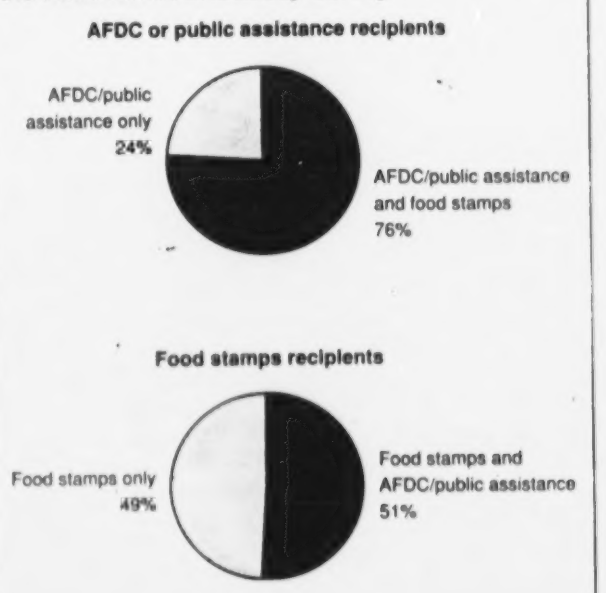
In the following sections of this report, we analyze the literacy proficiencies of *AFDC or public assistance recipients* (including those who also received food stamps), and *food stamps recipients* (including those who also received AFDC or public assistance). In reflecting on these data, readers should bear in mind that the population of AFDC or public assistance recipients and the population of food stamps recipients are neither synonymous nor mutually exclusive, because the eligibility criteria for the programs are different. Although most (about three-quarters) of the adults whose families had received AFDC or public assistance in the past year said they had also received food stamps, only about half the food stamps recipients reported having also received AFDC or public assistance (Figure 1).

ABOUT THIS REPORT

This report's primary goal is to deepen our understanding of the welfare population by examining the levels of literacy and the role of literacy among recipients. We hope that this information will inform the ongoing debate about welfare reform and assist those formulating basic education and literacy programs for welfare recipients who need them.

The following parts of this report profile the literacy skills of the welfare population and analyze relationships between literacy and various aspects of their lives. Part I describes the range of literacy skills among AFDC or public assistance recipients and among food stamps recipients, and it gives examples of the types of prose, document, and quantitative tasks that recipients are likely (and unlikely) to perform successfully. Part II compares the literacy skills of those in various groups within the welfare population. Part III explores associations between education and literacy. Part IV studies connections between literacy and labor force experience.

Figure 1
Percentages of AFDC/public assistance and food stamps recipients in 1992 whose families also received other types of welfare support, based on the National Adult Literacy Survey


AFDC or public assistance recipients
AFDC/public assistance only 24%
AFDC/public assistance and food stamps 76%
Food stamps recipients
Food stamps only 49%
Food stamps and AFDC/public assistance 51%

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Part V reviews current research on the effectiveness of programs designed to improve welfare recipients' employment prospects through education and training. The final section offers concluding comments.

Throughout the report, the literacy skills of different groups of adults are compared. Such comparisons are based on significance tests using standard errors. For the sake of brevity, these tests are not presented in this text, and only those differences that are statistically significant have been noted. In some cases, the results for two groups may appear to vary, but the difference is not statistically significant. In other cases, two sets of results may seem equivalent but are, in fact, statistically different. Readers should bear this in mind when interpreting the tables and graphs in this report.

A final comment. The findings presented in these pages tell us a great deal about the relationships between

literacy and various factors, but they do not provide information as to causes and effects. We can hypothesize that certain experiences increase one's literacy skills, but in many cases the relationships are probably reciprocal. For example, employed individuals display stronger literacy skills than unemployed persons. Why does this occur? One obvious explanation is that working in a job increases a person's literacy skills, as he or she has to read and use a range of print materials. It is also likely, however, that having strong literacy skills increases the likelihood of being employed. In other words, literacy shapes and is shaped by a wide and interconnected assortment of factors. We have sought to reflect this complexity in reporting the results herein.

• • • •

PART I: LITERACY IN THE WELFARE POPULATION

Other studies have documented the problem of limited schooling among welfare recipients, but to date very little has been known about recipients' literacy skills. Using information from the National Adult Literacy Survey, however, it is possible to construct a detailed picture of the literacy proficiencies of AFDC or public assistance recipients and of food stamps recipients and to compare this picture with results for adults in the general population.

This part of the report compares the overall literacy proficiencies of welfare recipients with those of adults nationwide and examines the distribution of literacy skills in the welfare and general populations. Sample tasks are provided to illustrate the types of literacy skills exhibited by those who performed in each of the levels of prose, document, and quantitative literacy.

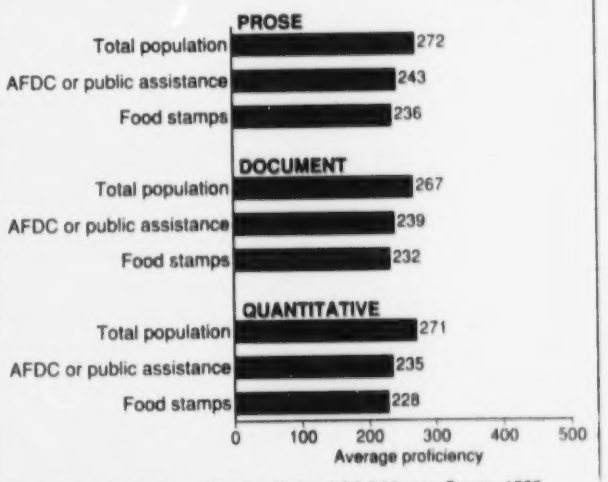
AVERAGE LITERACY PROFICIENCIES

As explained in the Introduction, the performance of individuals who participated in the National Adult Literacy Survey are summarized on three literacy scales, measuring prose, document, and quantitative literacy. Each scale ranges from 0 to 500. On average, the literacy proficiencies of AFDC or public assistance recipients and food stamps recipients were lower than those of adults nationwide (Figure 1.1). The average prose score of adults in the total population was 272, for example, but that of AFDC and public assistance recipients was 243 (29 points lower), and that of food stamps recipients was 236 (36 points lower).

Findings for the other two literacy scales are similar, although the performance gap between welfare recipients and adults in the general population appears to be somewhat larger on the quantitative scale than on the prose or document scales.

It is also noteworthy that, within the welfare population, literacy proficiencies tended to be higher for AFDC and public assistance recipients than for food stamps recipients. One plausible explanation for these differences is that food stamps recipients tend to be older than AFDC or public assistance recipients, and older adults tend to display lower literacy proficiencies than younger adults. Furthermore, individuals who have limiting physical or

Figure 1.1
Average literacy proficiencies of adults in the total and welfare populations, by literacy scale



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

mental health conditions demonstrate more limited literacy skills (on average) than those who do not, and food stamps recipients were more likely than AFDC or public assistance recipients to report having such conditions. These results are discussed in Part II.

LEVELS OF LITERACY

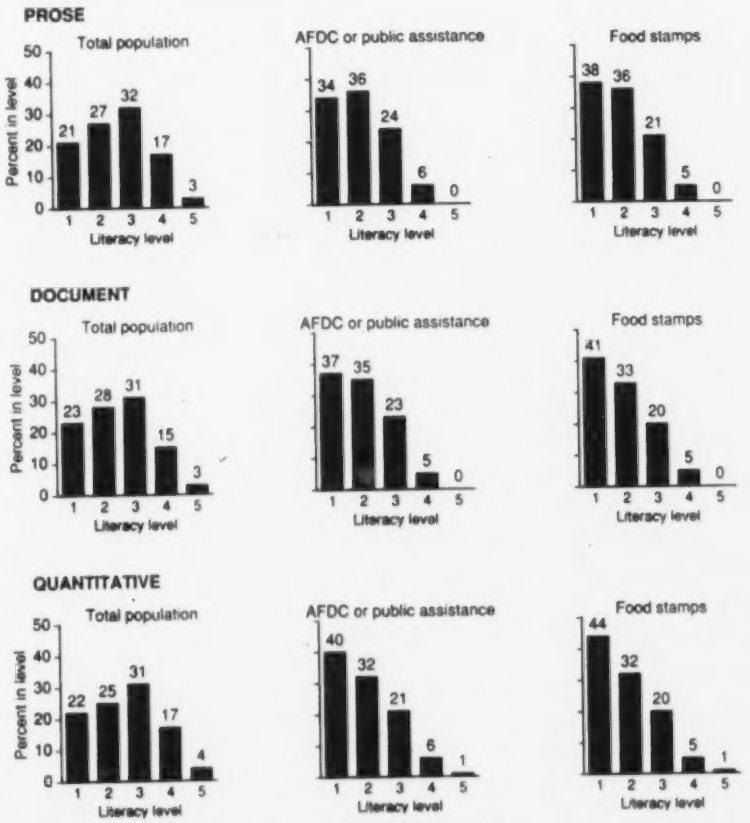
In viewing these results, it is important to remember that not all welfare recipients have limited literacy proficiencies. Within any population—be it the entire adult population, or welfare recipients, or some other group—there are some individuals with relatively strong skills and others with comparatively weak ones. The relevant question is, are adults in a particular group of interest (in this case, welfare recipients) disproportionately likely to display low, or high, literacy proficiencies? In other words, what is the distribution of skills within the population?

Such questions can be answered by studying the percentages of welfare recipients who scored in each of the five levels on each literacy scale, and comparing these with the percentages of adults nationwide who did so. These data are very useful because they reveal the heterogeneity of performance within a population—information that would be missing if one looked only at average scores.

In the national population, approximately one out of five adults (21 percent) performed in Level 1 on the prose scale, while 27 percent performed in Level 2, 32 percent performed in Level 3, 17 percent performed in Level 4, and 3 percent performed in Level 5 (Figure 1.2). The distributions of performance across the levels of document and quantitative proficiency were highly similar.

In contrast, welfare recipients were far more likely to perform in the lowest literacy levels on each scale and far less likely to attain the highest levels. More than one-third of adults who said that they or their families had received AFDC, public assistance, or food stamps in the past year scored in the lowest level of prose, document, and quantitative literacy, and another third performed in the second lowest level. At the other end of the

Figure 1.2
Percentage of adults in the total and welfare populations who performed in each literacy level, by literacy scale



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

spectrum, just 5 to 7 percent attained the two highest literacy levels on each scale.

These results are sobering, but it is important to recognize that not all welfare recipients displayed limited literacy skills. On each literacy scale, between one-quarter and one-third of the AFDC or public assistance recipients and the food stamp recipients performed in Level 3 or higher. These findings suggest that the welfare population is quite diverse, and data presented later in this report reinforce this view.

Although many of the welfare recipients who participated in the National Adult Literacy Survey had not graduated from high school, about one-quarter had earned high school diplomas and almost 20 percent had gone on to complete some post-secondary education. Further, about one-third of those whose families had received welfare support in the past year were working at the time of the survey. These data are explored later in the report.

The remainder of this section takes a closer look at the distribution of literacy skills within the welfare population, compares these with the results for the general population, and examines the types of literacy tasks that characterize performance in each level of prose, document, and quantitative literacy.

LEVEL 1

More than three out of every 10 individuals who had received AFDC or public assistance in the 12 months before the survey performed in Level 1 on the prose literacy scale, and as many as four out of 10 scored in this level on the document and quantitative scales. Among food stamps recipients, nearly four out of every 10 scored in the lowest level of prose literacy, and more than four out of 10 scored in the lowest level of document and quantitative literacy.

Across the literacy scales, welfare recipients were far more likely than adults in the general population to perform in the lowest level. Slightly

EXAMPLE TASK FOR PROSE LITERACY, LEVEL 1

Underline the sentence that tells what Ms. Chanin ate during the swim.

Swimmer completes Manhattan marathon

The Associated Press

NEW YORK—University of Maryland senior Stacy Chanin on Wednesday became the first person to swim three 28-mile laps around Manhattan.

Chanin, 23, of Virginia, climbed out of the East River at 96th Street at 9:30 p.m. She began the swim at noon on Tuesday.

A spokesman for the swimmer, Roy Brunett, said Chanin had kept up her strength with "banana and honey" sandwiches, hot chocolate, lots of water and granola bars."

Chanin has twice circled Manhattan before and trained for the new feat by swimming about 28.4 miles a week. The Yonkers native has competed as a swimmer since she was 15 and hoped to persuade Olympic authorities to add a long-distance swimming event.

The Leukemia Society of America solicited pledges for each mile she swam.

In July 1983, Julie Ridge became the first person to swim around Manhattan twice. With her three laps, Chanin came up just short of Diana Nyad's distance record, set on a Florida-to-Cuba swim.

higher percentages of food stamps recipients than AFDC or public assistance recipients scored in Level 1 on each scale, although the differences are not large. For AFDC or public assistance recipients and food stamps recipients alike, the largest performance deficits occur on the quantitative scale. In fact, food stamps recipients were twice as likely as adults nationwide to perform in Level 1 on this literacy scale.

What does it mean to perform in Level 1? To answer this question, it is helpful to examine the nature of the tasks that characterize this level of literacy. On the prose literacy scale, some individuals who score in Level 1 demonstrate the ability to read relatively short pieces of text (such as brief newspaper articles) to find a piece of information that is identical to or synonymous with information given in the directive. Typically, little or no distracting information (that is, information that seems plausible but is incorrect) is present in such tasks.

Percentages in Level 1

	Total population	AFDC or public assistance	Food stamps
Prose	21	34	38
Document	23	37	41
Quantitative	22	40	44

Individuals who perform in Level 1 may succeed with prose tasks that ask them to:

- identify a country mentioned in a short article *(149)*
- locate a piece of information in a sports article *(210)*
- underline a sentence explaining the action stated in a short article *(225)*

EXAMPLE TASK FOR DOCUMENT LITERACY, LEVEL 1

You have gone to an employment center for help in finding a job. You know that this center handles many different kinds of jobs. Also, several of your friends who have applied here have found jobs that appeal to you.

The agent has taken your name and address and given you the rest of the form to fill out. Complete the form so the employment center can help you get a job.

Birth date_____ Age____ Sex: Male____ Female____

Height_____ Weight_____ Health_____

Last grade completed in school_____

Kind of work wanted:

Part-time_____ Summer_____

Full-time_____ Year-round_____

Level 1 encompasses a broad range of performance, however, and some adults who perform at the low end of this level are unlikely to succeed even with these types of tasks.

On the document literacy scale, some adults who score in Level 1 are able to locate a piece of information based on a literal match between the directive and the document. Little, if any, distracting information is present. Some adults in this level also display the ability to enter basic information about themselves onto an application form or other type of document. Specifically, individuals performing in the lowest level of document literacy may succeed with tasks that ask them to:

- sign their names on a brief form *(69)*
- locate the time of a meeting on a form *(180)*
- use a pie chart to locate a type of vehicle that has specific sales *(214)*

EXAMPLE TASK FOR QUANTITATIVE LITERACY, LEVEL 1

You wish to use the automatic teller machine at your bank to make a deposit. Figure the total amount of the two checks being deposited. Enter the amount on the form in the space next to TOTAL.

Availability of Deposits

Funds from deposits may not be available for immediate withdrawal. Please refer to your institution's rules governing funds availability for details.

Crediting of deposits and payments is subject to verification and collection of actual amounts deposited or paid in accordance with the rules and regulations of your financial institution.

PLEASE PRINT

YOUR MAC CARD NUMBER (No PINs PLEASE)
111 222 3334

YOUR FINANCIAL INSTITUTION
Union Bank

YOUR ACCOUNT NUMBER
987 555 674

YOUR NAME
Chris Jones

CHECK ONE ☐ DEPOSIT or ☐ PAYMENT

CASH	$	00
LIST CHECKS BY BANK NO.	ENDORSE WITH NAME & ACCOUNT NUMBER	
	557	19
	75	00
TOTAL		

DO NOT DETACH TICKET

DO NOT FOLD NO COINS OR PAPER CLIPS PLEASE

Some individuals who score at the low end of Level 1, however, are likely to have difficulty performing these types of tasks.

Some adults who score in the lowest level of quantitative literacy demonstrate the ability to perform single, relatively simple arithmetic operations, such as addition. The numbers to be used in such tasks are provided, and the operation to be performed is specified. More specifically, adults who perform in the lowest level of quantitative literacy may succeed with tasks that require them to:

- total a bank deposit entry *(191)*

Individuals who score in the low end of this literacy level are unlikely to succeed even with these types of tasks, however.

LEVEL 2

As was found in the Level 1 results, welfare recipients were more likely than adults in the general population to perform in Level 2 on each literacy scale. Roughly one-third of the AFDC or public assistance recipients and the food stamps recipients (32 to 36 percent) performed in the second level of prose, document, and quantitative literacy, compared with approximately one-quarter (25 to 28 percent) of adults nationwide.

EXAMPLE TASK FOR PROSE LITERACY, LEVEL 2

A manufacturing company provides its customers with the following instructions for returning appliances for service:

> **When returning appliance for servicing, include a note telling as clearly and as specifically as possible what is wrong with the appliance.**

A repair person for the company receives four appliances with the following notes attached. Circle the letter next to the note which best follows the instructions supplied by the company.

A **The clock does not run correctly on this clock radio. I tried fixing it, but I couldn't.**

B **My clock radio is not working. It stopped working right after I used it for five days.**

C **The alarm on my clock radio doesn't go off at the time I set. It rings 15-30 minutes later.**

D **This radio is broken. Please repair and return by United Parcel Service to the address on my slip.**

Combining the percentages who performed in Levels 1 and 2, one finds that on each literacy scale, between two-thirds and three-quarters of those who had received AFDC, public assistance, or food stamps in the past year scored in the two lowest levels, compared with about half the adults in the general population. Clearly then, welfare recipients are disproportionately likely to display limited literacy proficiencies.

What does it mean to perform in Level 2? Adults who score in this level on the prose literacy scale demonstrate the ability to locate a piece of information in a piece of text even when distracting information is present. They also appear to have little difficulty integrating, comparing, and contrasting two or more pieces of information found in a piece of printed material. Individuals in this literacy level are likely to succeed on literacy tasks that ask them to:

- underline the meaning of a term in a brochure on government benefits *(226)*
- locate two types of information in a sports article *(250)*

Percentages in Level 2

	Total population	AFDC or public assistance	Food stamps
Prose	27	36	36
Document	28	35	33
Quantitative	25	32	32

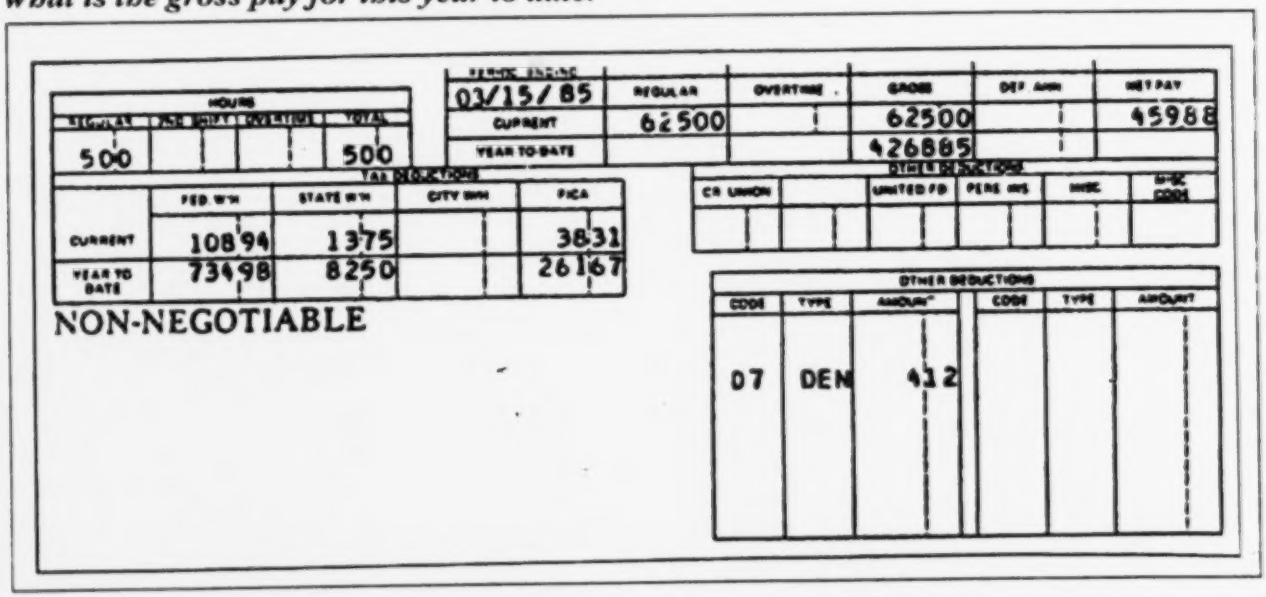
- interpret instructions from an appliance warranty *(275)*

Adults who perform in the second level of document literacy display skill at matching a piece of information in a form or other type of document with information in the directive, when distracting information is present. Low-level inferences are sometimes required in performing such tasks. Further, adults in Level 2 demonstrate the ability to integrate information from various parts of a document. They are likely succeed with literacy tasks that ask them to:

- locate an intersection on a street map *(230)*

EXAMPLE TASK FOR DOCUMENT LITERACY, LEVEL 2

What is the gross pay for this year to date?



22

- locate eligibility information in a table of employee benefits *(246)*

- identify and enter background information on a social security card application *(259)*

Individuals whose scores are in the Level 2 range on the quantitative literacy scale display the ability to perform a single arithmetic operation using numbers that are given to them or that can easily be located in a piece of printed material. The operation to be performed is either stated or easily determined from the format of the material (for example, an order form). Adults who perform in this literacy level are likely to succeed with quantitative tasks that ask them to:

- calculate postage and fees for certified mail *(238)*

- determine the difference in price between tickets for two shows *(246)*

- calculate the total costs of purchase from an order form *(270)*

Adults in Level 2 are also likely to have a very high rate of success in performing the types of literacy tasks associated with Level 1.

LEVEL 3

While welfare recipients were more likely than adults in the general population to score in the two lowest literacy levels, the pattern reverses in Level 3. On each literacy scale, the percentage of adults in the welfare population who scored in this level was lower than the percentage of adults nationwide who did so. Between 21 and 24

EXAMPLE TASK FOR QUANTITATIVE LITERACY, LEVEL 2

The price of one ticket and bus for "Sleuth" costs how much less than the price of one ticket and bus for "On the Town"?

THEATER TRIP

A charter bus will leave from the bus stop (near the Conference Center) at 4 p.m., giving you plenty of time for dinner in New York. Return trip will start from West 45th Street directly following the plays. Both theaters are on West 45th Street. Allow about 1½ hours for the return trip.

Time:	**4 p.m., Saturday, November 20**		
Price:	**"On the Town"**	**Ticket and bus**	**$11.00**
	"Sleuth"	**Ticket and bus**	**$8.50**
Limit:	**Two tickets per person**		

percent of adults who had received AFDC or public assistance payments and 20 to 21 percent of those who had received food stamps in the 12 months before the survey scored in Level 3, compared with 32 percent of the adult population overall.

What does it mean to perform in Level 3? In addition to demonstrating success with the more demanding tasks that are characteristic of this level of literacy, individuals who score in Level 3 are highly likely to succeed on the literacy tasks associated with Levels 1 and 2.

Adults who perform in the third level of prose literacy demonstrate the ability to match information in a piece of printed material with information in the directive when low-level inferences are required. They also display skill at integrating information from dense or lengthy text. Specifically, adults performing in this level on the prose scale are likely to succeed on literacy tasks that ask them to:

- write a brief letter explaining a billing error *(288)*
- find a sentence in a news article that interprets a situation *(304)*

EXAMPLE TASK FOR PROSE LITERACY, LEVEL 3

List two things that Chen became involved in or has done to help resolve conflicts due to discrimination.

DO YOU HAVE A QUESTION?

QUESTION: What is the new program for scheduling jurors?

ANSWER: This is a new way of organizing and scheduling jurors that is being introduced all over the country. The goals of this program are to save money, increase the number of citizens who are summoned to serve and decrease the inconvenience of serving.

The program means that instead of calling jurors for two weeks, jurors now serve only one day, or for the length of one trial if they are selected to hear a case. Jurors who are not selected to hear a case are excused at the end of the day, and their obligations to serve as jurors are fulfilled for three years. The average trial lasts two days once testimony begins.

An important part of what is called the One Day – One Trial program is the "standby" juror. This is a person called to the Courthouse if the number of cases to be tried requires more jurors than originally estimated. Once called to the Courthouse, the standby becomes a "regular" juror, and his or her service is complete at the end of one day or one trial, the same as everyone else.

Q. How was I summoned?

A. The basic source for names of eligible jurors is the Driver's License list which is supplemented by the voter registration list. Names are chosen from these combined lists by a computer in a completely random manner.

Once in the Courthouse, jurors are selected for a trial by this same computer and random selection process.

Q. How is the Jury for a particular trial selected?

A. When a group of prospective jurors is selected, more than the number needed for a trial are called. Once this group has been seated in the courtroom, either the Judge or the attorneys ask questions. This is called *voir dire*. The purpose of questions asked during *voir dire* is to ensure that all of the jurors who are selected to hear the case will be unbiased, objective and attentive.

In most cases, prospective jurors will be asked to raise their hands when a particular question applies to them. Examples of questions often asked are: Do you know the Plaintiff, Defendant or the attorneys in this case? Have you been involved in a case similar to this one yourself? Where the answer is yes, the jurors raising hands may be asked additional questions, as the purpose is to guarantee a fair trial for all parties. When an attorney believes that there is a legal reason to excuse a juror, he or she will challenge the juror for cause. Unless both attorneys agree that the juror should be excused, the Judge must either sustain or override the challenge.

After all challenges for cause have been ruled upon, the attorneys will select the trial jury from those who remain by exercising peremptory challenges. Unlike challenges for cause, no reason need be given for excusing a juror by peremptory challenge. Attorneys usually exercise these challenges by taking turns striking names from a list until both are satisfied with the jurors at the top of the list or until they use up the number of challenges allowed. Challenged jurors and any extra jurors will then be excused and asked to return to the jury selection room.

Jurors should not feel rejected or insulted if they are excused for cause by the Court or peremptorily challenged by one of the attorneys. The *voir dire* process and challenging of jurors is simply our judicial system's way of guaranteeing both parties to a lawsuit a fair trial.

Q. Am I guaranteed to serve on a jury?

A. Not all jurors who are summoned actually hear a case. Sometimes all the Judges are still working on trials from the previous day, and no new jurors are chosen. Normally, however, some new cases begin every day. Sometimes jurors are challenged and not selected.

- read a lengthy article to identify behaviors that meet a stated condition *(316)*

Adults who perform in Level 3 on the document scale appear to have little difficulty integrating several pieces of information from one or more documents. They also display skill at using and interpreting rather complex tables and graphs containing information that is either irrelevant or inappropriate to the task. Individuals who score in this level are likely to succeed with document tasks that ask them to:

- identify information in a bar graph showing energy sources for various years *(277)*
- use a sign-out sheet to respond to a call about a resident *(298)*
- enter information into an automobile maintenance record form *(323)*

Percentages in Level 3

	Total population	AFDC or public assistance	Food stamps
Prose	32	24	21
Document	31	23	20
Quantitative	31	21	20

Individuals scoring in the third level of quantitative literacy demonstrate skill at performing tasks in which two or

EXAMPLE TASK FOR DOCUMENT LITERACY, LEVEL 3

You need to smooth wood in preparation for sealing and plan to buy garnet sandpaper. What type of sandpaper should you buy?

ABRASIVE SELECTION GUIDE

MATERIAL & OPERATION	PRODUCTION®					GARNET				WETORDRY®				FRE-CUT®		EMERY		
	EC	C	M	F	EF	C	M	F	EF	VF	EF	SF	UF	VF	EF	C	M	F
WOOD																		
Paint Removal	■	■				■												
Heavy Stock Removal	■	■				■												
Moderate Stock Removal			■				■											
Preparation for Sealing				■				■										
After Sealer					■				■		■							
Between Coats												■			■			
After Final Coat												■						
METAL																		
Rust and Paint Removal	■	■														■		
Light Stock Removal	■	■															■	
Preparation for Priming			■	■										■	■			■
Finishing and Polishing					■						■	■	■					
After Primer												■			■			
Between Coats												■						
After Final Coat												■						
PLASTIC & FIBERGLASS																		
Shaping	■	■																
Light Stock Removal			■															
Finishing & Scuffing				■	■					■				■				

EC = Extra Coarse C = Coarse M = Medium F = Fine VF = Very Fine EF = Extra Fine SF = Super Fine UF = Ultra Fine

SAFETY INFORMATION:

■ Wear approved safety goggles when sanding.

■ Use particle/dust mask or other means to prevent inhalation of sanding dust.

■ When using power tools, follow manufacturer's recommended procedures and safety instructions.

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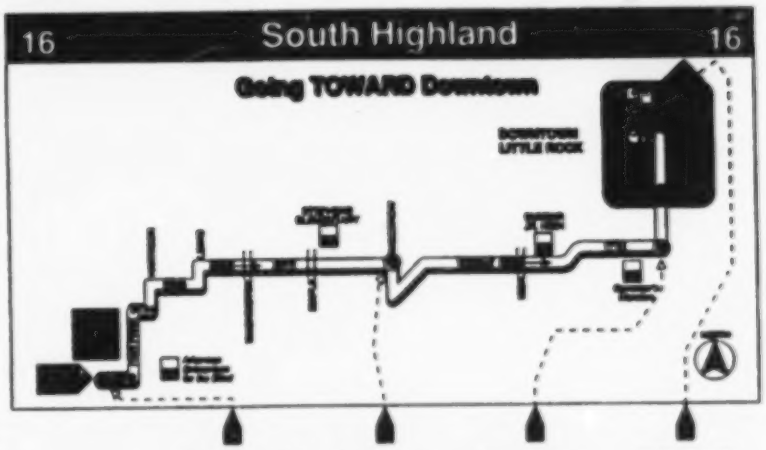
more numbers are needed to solve an arithmetic problem and these numbers must be found in a piece of printed material. The operation(s) to be performed can be determined from the arithmetic relation terms used in the directive. Some of the tasks in this level involve the use of a calculator. Specifically, adults who perform in Level 3 on the quantitative scale are likely to succeed with tasks that ask them to:

- calculate the difference between the regular and sales prices of an item in an advertisement *(278)*
- determine the discount from an oil bill if paid within 10 days *(308)*
- calculate miles per gallon using information from a mileage record chart *(321)*

Adults in Level 3 are also likely to have a very high rate of success in performing the types of literacy tasks associated with Levels 1 and 2.

EXAMPLE FOR QUANTITATIVE LITERACY, LEVEL 3

Suppose that you took the 12:45 p.m. bus from U.A.L.R. Student Union to 17th and Main on a Saturday. According to the schedule, how many minutes is the bus ride?



BUS LEAVES from U.A.L.R. Student Union	Bus arrives at 20th & Woodrow	Bus arrives at 17th & Main	BUS ENDS at Capitol & Louisiana
WEEKDAYS			
A.M. 6:11	6:21	6:30	6:39
6:41	6:51	7:00	7:15
7:11	7:21	7:30	7:45
7:41	7:51	8:00	8:15
8:11	8:21	8:30	8:45
8:41	8:51	9:00	9:15
9:14	9:27	9:39	9:48
9:44	9:57	10:09	10:15
10:14	10:27	10:39	10:45
10:44	10:57	11:09	11:15
11:14	11:27	11:39	11:45
11:44	11:57	12:09	12:15
P.M. 12:14	12:27	12:39	12:48
12:44	12:57	1:09	1:15
1:14	1:27	1:39	1:48
1:44	1:57	2:09	2:15
2:14	2:27	2:39	2:48
2:44	2:57	3:09	3:15
3:14	3:27	3:39	3:48
3:43	3:56	4:08	4:15
4:13	4:26	4:39	4:46
4:43	4:56	5:08	5:15
5:13	5:26	5:39	5:48
5:46	5:56	6:07	6:17
6:11	6:26	6:39	-
6:46	6:57	7:09	-
SATURDAY			
A.M.	6:26	6:51	6:39
	6:46	6:57	7:15
	7:46	7:57	8:15
	8:46	8:57	9:15
	9:46	9:57	10:15
	10:46	10:57	11:15
	11:46	11:57	12:15
P.M.	12:46	12:57	1:15
	1:46	1:57	2:15
	2:46	2:57	3:15
	3:46	3:57	4:15
	4:46	4:57	5:15
	5:46	5:57	6:15
	6:44	6:56	7:05

LEVEL 4

Adults in the welfare population were far less likely than those in the general population to attain the fourth literacy level. Across the literacy scales, 15 to 17 percent of adults nationwide reached Level 4, the second highest level defined in the survey. In contrast, just 5 to 6 percent of AFDC or public assistance recipients and food stamps recipients did so. Stated differently, adults in the general population were approximately three times more likely than welfare recipients to attain the fourth level of prose, document, and quantitative literacy.

What does it mean to perform in Level 4? Individuals who scored in this level of prose literacy display the ability to match multiple pieces of information in a piece of writing. Further, they appear to be able to integrate or synthesize information from complex or lengthy pieces of text and to make more complex inferences about what they read. More specifically, they are likely to succeed with prose tasks that ask them to:

- state in writing an argument made in a lengthy newspaper article *(328)*
- contrast views expressed in two editorials on fuel-efficient cars *(359)*
- compare two metaphors used in a poem *(374)*

EXAMPLE TASK FOR PROSE LITERACY, LEVEL 4

Contrast Dewey's and Hanna's views about the existence of technologies that can be used to produce more fuel-efficient cars while maintaining the size of the car.

Face-Off: Getting More Miles Per Gallon

Demand cars with better gas mileage

By Robert Dewey
Guest columnist

WASHINGTON — Warning: Automakers are resurrecting their heavy-metal dinosaurs, aka gas guzzlers.

Government reports show that average new-car mileage has declined to 28.2 miles per gallon — the 1986 level. To reverse this trend, Congress must significantly increase existing gas-mileage standards.

More than half our Nobel laureates and 700 members of the National Academy of Sciences recently called global warming "the most serious environmental threat of the 21st century." In 1988, oil imports climbed to a near-record 46% of U.S. consumption. Increasing gas mileage is the single biggest step we can take to reduce oil imports and curb global warming. Greater efficiency also lowers our trade deficit (oil imports represent 40% of it) and decreases the need to drill in pristine areas.

Bigger engines and bigger cars mean bigger profits for automakers, who offer us the products they want us to buy. More than ever, Americans want products that have less of an environmental impact. But with only a few fuel-efficient cars to choose from, how do we find ones that meet all our needs?

Government studies show automakers have the technology to dramatically improve gas mileage — while maintaining the 1987 levels of comfort, performance and size mix of vehicles. Automakers also have the ability to make their products safer. The cost of these improvements will be offset by savings at the gas pumps.

Cars can average 45 mpg and light trucks 35 mpg primarily by utilizing engine and transmission technologies already on a few cars today. Further improvements are possible by using technologies like the two-stroke engine and better aerodynamics that have been developed but not used.

When the current vehicle efficiency standards were proposed in 1974, Ford wrongly predicted that they "would require either all sub-Pinto-sized vehicles or some mix of vehicles ranging from a sub-subcompact to perhaps a Maverick." At that time, Congress required a 100% efficiency increase; raising gas mileage to 45 mpg requires only a 60% increase.

Americans want comfortable, safe and efficient cars. If automakers won't provide them, Congress must mandate them when it considers the issue this summer.

Let's hope lawmakers put the best interest of the environment and the nation ahead of the automakers' lobbyists and political action committees.

Robert Dewey is a conservation analyst for the Environmental Action Foundation.

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Don't demand end to cars people want

By Thomas H. Hanna
Guest columnist

DETROIT — Do Americans look forward to the day when they'll have to haul groceries, shuttle the kids to and from school or take [illegible] vacations in compact and subcompact cars?

I doubt it. [illegible]hich is why U.S. and import carmakers oppose the 40-miles-per-gallon to 45 mpg corporate average fuel economy mandates that some are pushing in Congress, either to curb tailpipe carbon dioxide emissions because of alleged global warming or for energy conservation.

Since the mid-1970s, automakers have doubled the fleet average fuel economy of new cars to 28 mpg — and further progress will be made.

Compact and subcompact cars with mileages of 40 mpg or better are now available, yet they appeal to only 5% of U.S. car buyers.

But to achieve a U.S. fleet average of 40 mpg to 45 mpg, carmakers would have to sharply limit the availability of family-size models and dramatically trim the size and weight of most cars.

There simply are not magic technologies to meet such a standard.

Almost every car now sold in the USA would have to be drastically downsized, and many would be obsolete.

As a result, Americans each year would be unable to buy the vehicles most suited for their needs: mid- and family-size models, luxury automobiles, mini-vans, small trucks and utility vehicles.

The fleet shift to compacts and subcompacts could also force the closing of assembly plants, supplier firms and dealerships, at a cost of thousands of U.S. jobs.

Although a growing number of scientists are skeptical of global warming, the issue deserves thorough international scientific evaluation, not premature unilateral U.S. action.

Carbon dioxide emissions from U.S. vehicles total less than 2.5% of worldwide "greenhouse" gases. Even doubling today's corporate average fuel economy for U.S. cars — if technically possible — would cut these gases about 5%.

Whatever the motivation — alleged global warming or energy conservation — the stakes are high for millions of Americans and thousands of U.S. jobs in unrealistic corporate average fuel economy mandates.

Thomas H. Hanna is president and chief executive officer of the Motor Vehicle Manufacturers Association of the United States.

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Individuals who perform in Level 4 on the document scale demonstrate the ability to make high-level inferences to interpret various types of documents. They also appear to have little difficulty performing document literacy tasks that involve the use of conditional information. Adults who score in the fourth level on this literacy scale are likely to succeed with tasks that ask them to:

- use a table to identify the percentage of cases that meet specified conditions *(342)*
- use a schedule to determine which bus to take in a given situation *(352)*
- use a table to identify a pattern in oil exports over time *(352)*

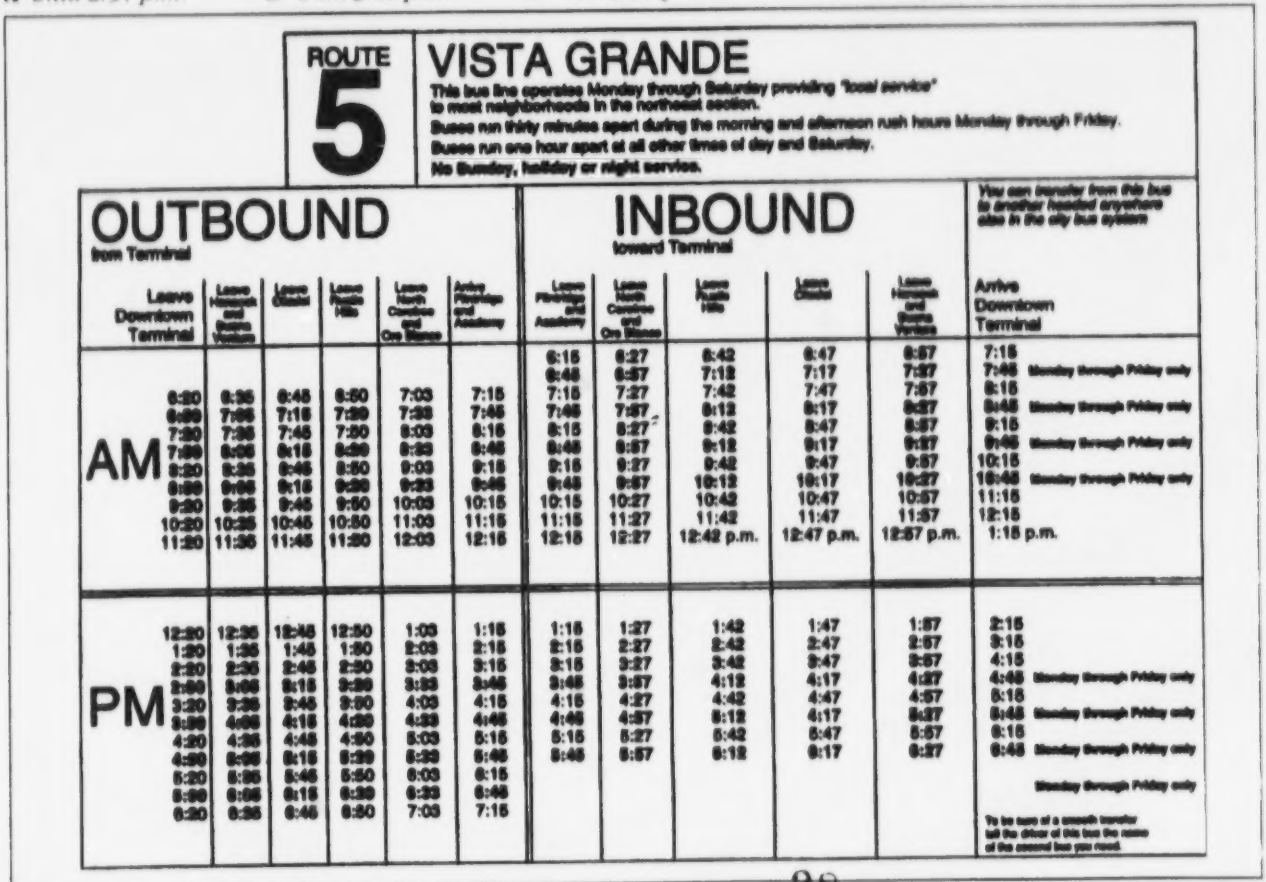
Percentages in Level 4

	Total population	AFDC or public assistance	Food stamps
Prose	17	6	5
Document	15	5	5
Quantitative	17	6	5

EXAMPLE TASK FOR DOCUMENT LITERACY, LEVEL 4

On Saturday afternoon, if you miss the 2:35 bus leaving Hancock and Buena Ventura going to Flintridge and Academy, how long will you have to wait for the next bus?

A Until 2:57 p.m. *B Until 3:05 p.m.* *C Until 3:35 p.m.* *D Until 3:57 p.m.* *E I don't know*



ROUTE 5

VISTA GRANDE

This bus line operates Monday through Saturday providing "local service" to most neighborhoods in the northeast section.
Buses run thirty minutes apart during the morning and afternoon rush hours Monday through Friday.
Buses run one hour apart at all other times of day and Saturday.
No Sunday, holiday or night service.

OUTBOUND from Terminal

	Leave Downtown Terminal	Leave Hancock and Buena Ventura	Leave Ocean	Leave Purple Hills	Leave North Crestline and Ore Blanco	Arrive Flintridge and Academy
AM	6:20	6:35	6:45	6:50	7:03	7:15
	6:50	7:05	7:15	7:20	7:33	7:45
	7:20	7:35	7:45	7:50	8:03	8:15
	7:50	8:05	8:15	8:20	8:33	8:45
	8:20	8:35	8:45	8:50	9:03	9:15
	8:50	9:05	9:15	9:20	9:33	9:45
	9:20	9:35	9:45	9:50	10:03	10:15
	10:20	10:35	10:45	10:50	11:03	11:15
	11:20	11:35	11:45	11:20	12:03	12:15
PM	12:20	12:35	12:45	12:50	1:03	1:15
	1:20	1:35	1:45	1:50	2:03	2:15
	2:20	2:35	2:45	2:50	3:03	3:15
	2:50	3:05	3:15	3:20	3:33	3:45
	3:20	3:35	3:45	3:50	4:03	4:15
	3:50	4:05	4:15	4:20	4:33	4:45
	4:20	4:35	4:45	4:50	5:03	5:15
	4:50	5:05	5:15	5:20	5:33	5:45
	5:20	5:35	5:45	5:50	6:03	6:15
	5:50	6:05	6:15	6:20	6:33	6:45
	6:20	6:35	6:45	6:50	7:03	7:15

INBOUND toward Terminal

	Leave Flintridge and Academy	Leave North Crestline and Ore Blanco	Leave Purple Hills	Leave Ocean	Leave Hancock and Buena Ventura	Arrive Downtown Terminal
AM	6:15	6:27	6:42	6:47	6:57	7:15
	6:45	6:57	7:12	7:17	7:27	7:45 Monday through Friday only
	7:15	7:27	7:42	7:47	7:57	8:15
	7:45	7:57	8:12	8:17	8:27	8:45 Monday through Friday only
	8:15	8:27	8:42	8:47	8:57	9:15
	8:45	8:57	9:12	9:17	9:27	9:45 Monday through Friday only
	9:15	9:27	9:42	9:47	9:57	10:15
	9:45	9:57	10:12	10:17	10:27	10:45 Monday through Friday only
	10:15	10:27	10:42	10:47	10:57	11:15
	11:15	11:27	11:42	11:47	11:57	12:15
	12:15	12:27	12:42 p.m.	12:47 p.m.	12:57 p.m.	1:15 p.m.
PM	1:15	1:27	1:42	1:47	1:57	2:15
	2:15	2:27	2:42	2:47	2:57	3:15
	3:15	3:27	3:42	3:47	3:57	4:15
	3:45	3:57	4:12	4:17	4:27	4:45 Monday through Friday only
	4:15	4:27	4:42	4:47	4:57	5:15
	4:45	4:57	5:12	5:17	5:27	5:45 Monday through Friday only
	5:15	5:27	5:42	5:47	5:57	6:15
	5:45	5:57	6:12	6:17	6:27	6:45 Monday through Friday only
						Monday through Friday only

You can transfer from this bus to another headed anywhere else in the city bus system

To be sure of a smooth transfer tell the driver of this bus the name of the second bus you need.

Adults who score in the fourth level of quantitative literacy appear to have little difficulty performing two or more arithmetic operations in sequence. They also demonstrate skill at performing single arithmetic operations in which the quantities are found in different types of displays, or in which the operations must be inferred from the information given or from prior knowledge. More specifically, individuals who score in Level 4 on the quantitative literacy scale are likely to succeed with tasks that ask them to:

- use information in a news article to calculate how much money should go to raising a child *(350)*
- use an eligibility pamphlet to calculate how much money a couple would receive for basic supplemental security income in one year *(368)*

Adults in Level 4 are also likely to have a very high rate of success with the types of literacy tasks associated with performance in Levels 1, 2, and 3.

EXAMPLE TASK FOR QUANTITATIVE LITERACY, LEVEL 4

Estimate the cost per ounce of the creamy peanut butter. Write your estimate on the line provided.

Unit price	You pay
11.8¢ per oz.	1.89
rich chnky pnt bt	
10693	16 oz.

Unit price	You pay
1.59 per lb.	1.99
creamy pnt butter	
10732	20 oz.

LEVEL 5

Only small percentages of adults in the general population (3 to 4 percent) and virtually none of the welfare recipients attained the highest level of prose, document, and quantitative literacy. Less than 1 percent of the adults who had received welfare support in the past year scored in Level 5 on the prose and document scales, and only 1 percent reached this level on the quantitative scale.

What does it mean to perform in Level 5? Adults in this level of prose literacy appear to have little difficulty finding information in dense text that contains a considerable amount of irrelevant (or distracting) information. Also, they demonstrate the ability to make high-level inferences and to use specialized background knowledge to help them understand what they read. Adults in Level 5 on the prose scale are likely to succeed with tasks that ask them to:

- compare the approaches stated in a narrative on growing up *(382)*
- summarize two ways in which lawyers may challenge prospective jurors *(410)*

EXAMPLE TASK FOR PROSE LITERACY, LEVEL 5

Identify and summarize the two kinds of challenges that attorneys use while selecting members of a jury.

DO YOU HAVE A QUESTION?

QUESTION: What is the new program for scheduling jurors?

ANSWER: This is a new way of organizing and scheduling jurors that is being introduced all over the country. The goals of this program are to save money, increase the number of citizens who are summoned to serve and decrease the inconvenience of serving.

The program means that instead of calling jurors for two weeks, jurors now serve only one day, or for the length of one trial if they are selected to hear a case. Jurors who are not selected to hear a case are excused at the end of the day, and their obligations to serve as jurors are fulfilled for three years. The average trial lasts two days once testimony begins.

An important part of what is called the One Day – One Trial program is the "standby" juror. This is a person called to the Courthouse if the number of cases to be tried requires more jurors than originally estimated. Once called to the Courthouse, the standby becomes a "regular" juror, and his or her service is complete at the end of one day or one trial, the same as everyone else.

Q. How was I summoned?

A. The basic source for names of eligible jurors is the Driver's License list which is supplemented by the voter registration list. Names are chosen from these combined lists by a computer in a completely random manner.

Once in the Courthouse, jurors are selected for a trial by this same computer and random selection process.

Q. How is the Jury for a particular trial selected?

A. When a group of prospective jurors is selected, more than the number needed for a trial are called. Once this group has been seated in the courtroom, either the Judge or the attorneys ask questions. This is called *voir dire*. The purpose of questions asked during *voir dire* is to ensure that all of the jurors who are selected to hear the case will be unbiased, objective and attentive.

In most cases, prospective jurors will be asked to raise their hands when a particular question applies to them. Examples of questions often asked are: Do you know the Plaintiff, Defendant or the attorneys in this case? Have you been involved in a case similar to this one yourself? Where the answer is yes, the jurors raising hands may be asked additional questions, as the purpose is to guarantee a fair trial for all parties. When an attorney believes that there is a legal reason to excuse a juror, he or she will challenge the juror for cause. Unless both attorneys agree that the juror should be excused, the Judge must either sustain or override the challenge.

After all challenges for cause have been ruled upon, the attorneys will select the trial jury from those who remain by exercising peremptory challenges. Unlike challenges for cause, no reason need be given for excusing a juror by peremptory challenge. Attorneys usually exercise these challenges by taking turns striking names from a list until both are satisfied with the jurors at the top of the list or until they use up the number of challenges allowed. Challenged jurors and any extra jurors will then be excused and asked to return to the jury selection room.

Jurors should not feel rejected or insulted if they are excused for cause by the Court or peremptorily challenged by one of the attorneys. The *voir dire* process and challenging of jurors is simply our judicial system's way of guaranteeing both parties to a lawsuit a fair trial.

Q. Am I guaranteed to serve on a jury?

A. Not all jurors who are summoned actually hear a case. Sometimes all the Judges are still working on trials from the previous day, and no new jurors are chosen. Normally, however, some new cases begin every day. Sometimes jurors are challenged and not selected.

- interpret a brief phrase from a lengthy news article *(423)*

Individuals who score in the highest level of document literacy display the ability to search through complex displays that contain several pieces of distracting information. They also appear to have little difficulty making high-level inferences and using specialized background knowledge to interpret information in documents. They are likely to succeed with document literacy tasks that ask them to:

- use information in a table to complete a graph, including labeling the axes *(378)*
- use a table to compare credit cards, identify two categories of comparison, and write about the differences *(387)*

Percentages in Level 5

	Total population	AFDC or public assistance	Food stamps
Prose	3	0	0
Document	3	0	0
Quantitative	4	1	1

EXAMPLE TASK FOR DOCUMENT LITERACY, LEVEL 5

Using the information in the table, write a brief paragraph summarizing the extent to which parents and teachers agreed or disagreed on the statements about issues pertaining to parental involvement at their school.

Parents and Teachers Evaluate Parental Involvement at Their School

Do you agree or disagree that . . . ?

	Total	Level of School		
		Elementary	Junior High	High School
		percent agreeing		
Our school does a good job of encouraging parental involvement in sports, arts, and other nonsubject areas				
Parents	77	76	74	79
Teachers	77	73	77	85
Our school does a good job of encouraging parental involvement in educational areas				
Parents	73	82	71	64
Teachers	80	84	78	70
Our school only contacts parents when there is a problem with their child				
Parents	55	46	62	63
Teachers	23	18	22	33
Our school does not give parents the opportunity for any meaningful roles				
Parents	22	18	22	28
Teachers	8	8	12	7

Source: The Metropolitan Life Survey of the American Teacher, 1987

- use information from a table to write a paragraph about a school survey *(395)*

Those scoring in the highest level on the quantitative scale demonstrate skill at performing multiple arithmetic operations sequentially. They are also able to find the features of problems in a piece of printed matter and to use their background knowledge to determine the quantities or operations needed. Individuals who score in the fifth level of quantitative literacy are likely to succeed with tasks that ask them to:

- use an order form to calculate the shipping costs and total costs of items *(382)*
- use information from a news article to calculate the difference in times for completing a race *(405)*
- use a calculator to figure the total cost of carpet for a room *(421)*

Adults in Level 5 are likely to have a high rate of success in performing all the literacy tasks in the assessment—not only those in the highest level on each scale but also those associated with all the preceding levels.

EXAMPLE TASK FOR QUANTITATIVE LITERACY, LEVEL 5

You need to borrow $10,000. Find the ad for Home Equity Loans on page 2 in the newspaper provided. Explain to the interviewer how you would compute the total amount of interest charges you would pay under this loan plan. Please tell the interviewer when you are ready to begin.

FIXED RATE • FIXED TERM

HOME EQUITY LOANS

14.25%

Annual Percentage Rate
Ten Year Term

SAMPLE MONTHLY REPAYMENT SCHEDULE

Amount Financed	Monthly Payment
$10,000	$156.77
$25,000	$391.93
$40,000	$627.09

120 Months 14.25% APR

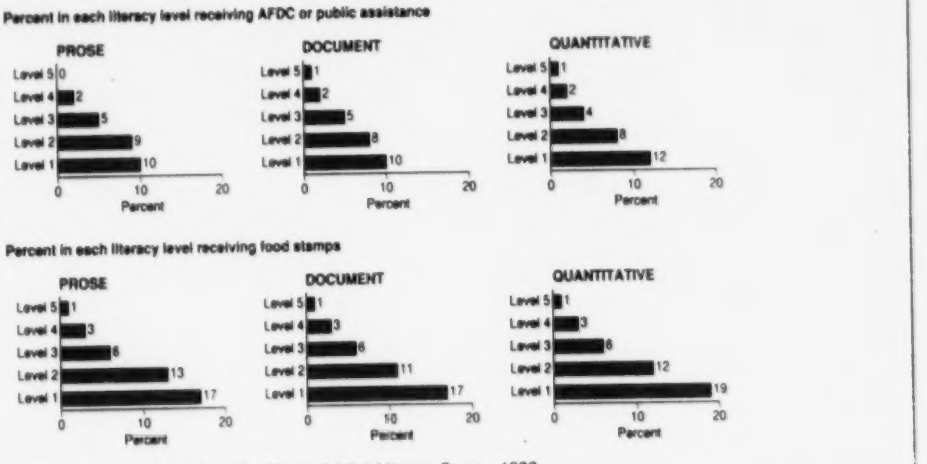
THE WELFARE STATUS OF ADULTS IN EACH LITERACY LEVEL

In addition to studying the percentages of welfare recipients who performed in the various literacy levels, it is useful to examine the percentages of adults in each literacy level who had received welfare support. By comparing these percentages with the proportion of AFDC or public assistance recipients and food stamps recipients in the general population, it is possible to determine the extent to which welfare recipients are over- or underrepresented in the various levels of prose, document, and quantitative literacy.

Across the literacy scales, welfare recipients are overrepresented in the lowest literacy level and underrepresented in the highest levels (Figure 1.3). For example, an estimated 6 percent of adults nationwide had received AFDC or public assistance in the 12 months before the survey. Yet, 10 to 12 percent of the respondents who performed in the lowest level of prose, document, or quantitative literacy had received this type of welfare support. Conversely, AFDC and public assistance recipients constitute only 2 to 3 percent of the respondents in the two highest levels on each literacy scale.

The pattern for food stamps recipients is even clearer. Although roughly 9 percent of adults nationwide had received food stamps in the 12 months before the survey, 17 to 19 percent of the adults who performed in Level 1 and 11 to 13 percent of those who scored in Level 2 said they had received this type of welfare support. Thus, food stamps recipients are overrepresented in the lowest literacy levels, particularly on the quantitative scale. On the other hand, they are underrepresented in the two highest levels. Only 4 percent of the adults who performed in Level 4 or 5 reported having received food stamps in the year before the survey—less than half the percentage of such adults in the general population.

Figure 1.3
Percentage of adults in each literacy level who had received welfare support in the preceding year, by literacy scale



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

COMPARING SELF-ASSESSED AND DEMONSTRATED LITERACY PROFICIENCIES

In addition to studying the performance results from the survey, it is interesting to see how individuals perceive their literacy skills. Accordingly, survey respondents were asked to indicate how well they read English: very well, well, not well, or not at all. In general, welfare recipients were less likely than adults in the total population to describe themselves as reading English either very well or well (Table 1.1).

This pattern is generally consistent with the assessment results, in that welfare recipients tended to display more limited literacy skills than adults in the national population. Still, it appears that most welfare recipients view their reading abilities quite positively. It may be that their skills enable them to meet many or most of the literacy demands they encounter in their daily lives.

Another perspective on the performance results can be obtained by comparing welfare recipients' demonstrated literacy skills with their self-assessed proficiencies. Such analyses indicate that the prose literacy proficiencies of adults who described themselves as having difficulty reading English were, in fact, far more limited than those of adults who described themselves as reading well or very well (Table 1.2). This pattern is clearly evident in the welfare populations as well as in the total population.

Among AFDC and public assistance recipients, for example, adults who said they read English well or very well had an average prose score of 255—approximately 100 points higher than that of AFDC and public assistance recipients who said they do not read English well or do not read it at all.

Table 1.1
Percentage of adults in the total and welfare populations who described themselves as reading English "very well" or "well"

	"Very well" or "well"
Total population	93
AFDC or public assistance	88
Food stamps	87

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 1.2
Average prose proficiencies of adults in the total and welfare populations, by self-assessed English reading ability

"Very well" or "well"	
Total population	282
AFDC or public assistance	255
Food stamps	250
"Not well" or "not at all"	
Total population	149
AFDC or public assistance	153
Food stamps	140

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

SUMMARY

- On average, the literacy skills of AFDC or public assistance recipients and food stamps recipients were much more limited than those of adults in the general population.

- More than one-third of adults who reported that they or their families had received AFDC, public assistance, or food stamps in the year before the survey performed in the lowest level of prose, document, and quantitative literacy defined in this survey (Level 1).

- Another one-third of the welfare recipients performed in the second lowest level of prose, document, and quantitative literacy (Level 2).

- Combining the percentages who performed in Levels 1 and 2 on each literacy scale, between two-thirds and three-quarters of those who had received AFDC, public assistance, or food stamps in the year preceding the survey scored in the two lowest levels, compared with about half the adults in the general population.

- Not all welfare recipients demonstrate limited literacy skills. On each literacy scale, between one-quarter and one-third of the welfare recipients performed in Level 3 or higher. Yet, just 5 to 7 percent attained the two highest levels on each scale.

- Adults who performed in Level 1 were disproportionately likely to report that they or someone in their family had received AFDC or public assistance payments or food stamps in the past 12 months, and those in Levels 4 and 5 were disproportionately likely to report that they had not received such support.

- In general, welfare recipients were less likely than adults in the total population to describe themselves as reading English very well or well.

- Adults who described themselves as not reading English well (or at all) did, in fact, display prose skills that were far more limited than those displayed by individuals who said they read well or very well. This pattern is found in the welfare populations as well as in the total population.

PART II: LITERACY IN DIFFERENT GROUPS

Who receives AFDC or public assistance? Who receives food stamps? And how do the characteristics of welfare recipients compare with the characteristics of the adult population as a whole? The data presented in this part of the report show that adults who receive welfare support are quite diverse. Some are young, and some are old. Some are married, while others are not. Some have limiting physical or mental health conditions.

It is not surprising that the literacy skills of welfare recipients also vary according to their characteristics and experiences. Although it is true that adults on welfare tended to display more limited literacy skills than the general population on average, some groups of welfare recipients performed better than others. This chapter explores the range of literacy skills in various groups of the welfare population, defined by their sex, race/ethnicity, health status, and other variables.

SEX

In 1992, according to the National Adult Literacy Survey data, almost half the adults in the United States (48 percent) were male, while the remaining 52 percent were female (Table 2.1).* Females were much more prevalent in the welfare populations than in the population as a whole. Two-thirds of the adults whose families had received food stamps in the year before the survey and 71 percent of those whose families had received AFDC or public assistance were female. This reflects the fact that the regular AFDC program is for mothers; a small, separate component of the program includes fathers. The eligibility rules for the two programs are different.

Regardless of their sex, adults who had received AFDC, public assistance, or food stamps had lower average literacy scores than their same-sex counterparts in the total population (Figure 2.1).

Within the welfare population, female AFDC and public assistance recipients outperformed male AFDC and public assistance recipients, as well as food stamps recipients of both sexes. Male food stamps recipients had the lowest average prose scores, while female food stamps recipients had the lowest quantitative scores. Male and female food stamps recipients shared the lowest average scores on the document literacy scale.**

Table 2.1
Percentage of males and females in the total and welfare populations

	Total population	AFDC or public assistance	Food stamps
Male	48	29	34
Female	52	71	66

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

*Throughout this section and the following sections, we report population estimates based on the National Adult Literacy Survey data. In some cases, these estimates may vary from census statistics due to the sampling procedures used.

**In this part of the report and the parts that follow, only the prose results are shown in the graphs. In many cases, results for the three literacy scales are similar. Where there are noteworthy differences on the document and quantitative scales, these are discussed.

Perhaps one of the most interesting findings here is that the pattern of sex differences in literacy proficiencies found in the general population varies in the welfare populations. Males and females in the total population had equivalent prose proficiencies, on average, but female AFDC, public assistance, and food stamps recipients had higher average prose scores than male recipients. On the document scale, the 4-point advantage held by males in the general population disappears in the food stamps population and is reversed in the AFDC and public assistance population, where females outperformed males by 6 points.

Further, while in the national population males outscored females by 11 points on the quantitative scale, this performance gap is reduced by half among food stamps recipients and disappears among men and women who received AFDC.

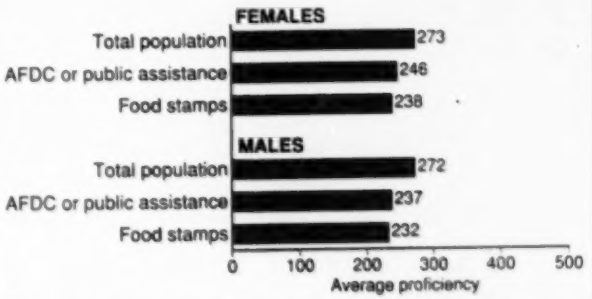
What explains these shifting relationships between sex and literacy proficiencies across the different subpopulations? One plausible explanation pertains to the fact that there are many more females than males on welfare. Female welfare recipients are therefore likely to be more diverse in their characteristics as well as in their literacy skills than their male counterparts. The relatively few men who do receive welfare support appear to have more limited literacy proficiencies, on average, than their female counterparts.

MARITAL STATUS

AFDC and food stamps recipients were about equally likely to report that they were married at the time of the survey (38 to 40 percent), yet both groups were less likely than adults in the national population (60 percent) to state that they were currently married (Table 2.2).* Although these findings are consistent with the stereotype that most welfare recipients are single, a substantial percentage of recipients are married.

Married individuals in the general population tended to display stronger literacy skills than unmarried individuals, but these performance differences by marital status are not evident in the welfare populations, with one exception (Figure 2.2). On all three literacy scales, the literacy proficiencies of married AFDC or public assistance recipients are similar to those of their unmarried counterparts. Among food stamps recipients, no differences in average performance between

Figure 2.1
Average prose literacy proficiencies of adults in the total and welfare populations, by sex



Source: Unpublished data from the *National Adult Literacy Survey, 1992*.

Table 2.2
Percentage of married and unmarried adults in the total and welfare populations

	Total population	AFDC or public assistance	Food stamps
Married	59	38	40
Unmarried or spouse absent	41	62	60

Source: Unpublished data from the *National Adult Literacy Survey, 1992*.

*Indivsduals who had never been married or who were separated, divorced, or widowed at the time of the survey were categorized as "unmarried or spouse absent."

married and unmarried individuals are found on the prose or document literacy scale. On the quantitative scale, however, married food stamps recipients outscored their unmarried counterparts by 14 points.

On all three literacy scales, unmarried food stamps recipients displayed weaker skills than any of the other groups examined. Their average proficiencies were 31 to 39 points lower than those of unmarried adults in the general population.

AGE

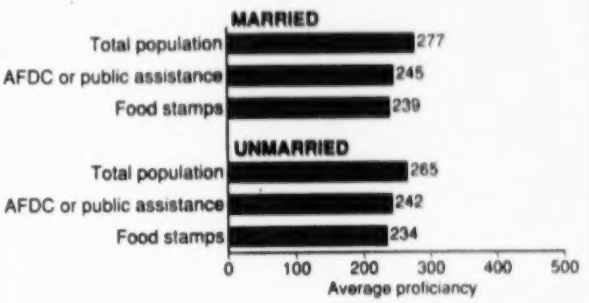
Welfare recipients tend to be younger than adults in the population as a whole. Approximately one-third of the AFDC or public assistance recipients and slightly more than one-quarter (27 percent) of the food stamps recipients were age 16 to 18 or age 19 to 24, compared with only 18 percent of adults nationwide (Table 2.3). At the other end of the age spectrum, just 5 percent of AFDC or public assistance recipients and 10 percent of food stamps recipients were age 65 and older, compared with 16 percent of the adult population as a whole. Of course, the categorical nature of the AFDC program helps to determine that its recipients will be younger; the difference in age does not necessarily reflect differences in rates of low income.

In the general population, average prose and quantitative scores rise from the youngest age group (age 16 to 18) to the 40 to 54 age group, then fall steadily across the older groups (Figure 2.3).

On the document scale, literacy skills appear to peak slightly earlier before starting to decline. These data suggest that literacy proficiencies improve from the teenage years through middle age, as individuals acquire knowledge and experience. Skills may then deteriorate somewhat with age.* On the other hand, older adults tend to have received less education than have younger adults, and this factor is also involved. Because the National Adult Literacy Survey did not assess the literacy skills of a particular group of individuals over time, the declines in average performance across the older age groups cannot be fully explained.

Among adults who said they had received welfare support in the past year, literacy skills also tended to decline across the age groups, but the patterns are somewhat different from those for the general population. In the AFDC and food stamps populations alike, average prose, document, and quantitative scores rise

Figure 2.2
Average prose literacy proficiencies of adults in the total and welfare populations, by marital status



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

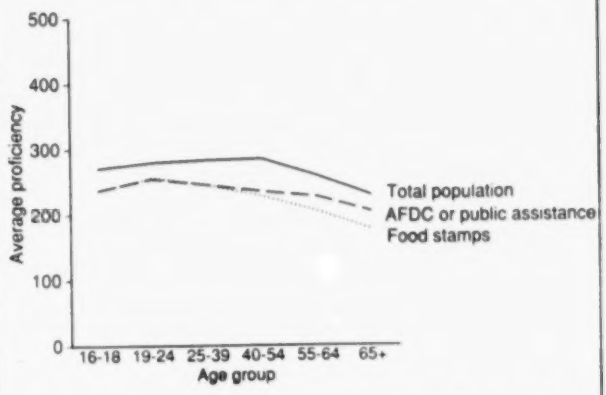
Table 2.3
Percentage of adults in various age groups in the total and welfare populations

	Total population	AFDC or public assistance	Food stamps
16 to 18	5	9	7
19 to 24	13	23	20
25 to 39	33	45	42
40 to 54	23	15	15
55 to 64	10	4	6
65 and older	16	5	10

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

*Other research has found that performance on certain types of motor, visual, and memory tasks does, in fact, decline with age.

Figure 2.3
Average prose literacy proficiencies of adults in the total and welfare populations, by age group



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 2.4
Percentage of adults in various racial/ethnic groups in the total and welfare populations

	Total population	AFDC or public assistance	Food stamps
White	76	45	49
Black	11	30	28
Hispanic	10	19	18
Asian/Pacific Islander	2	2	2
Other	1	4	3

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

from the 16 to 18 age group to the 19 to 24 age group, then decline across the older age groups. In other words, the literacy skills of welfare recipients seem to peak earlier than those of adults nationwide. Why might this be so? As seen later, many welfare recipients have limited experience in the work place—experience that may help adults to expand their literacy skills as they approach middle age. It may also be that welfare recipients end their education earlier, on average, than adults in the general population.

RACE/ETHNICITY

White adults are underrepresented in the welfare populations, while Black and Hispanic adults are overrepresented. For example, one out of 10 adults nationwide is Black, but more than one of every four food stamps recipients and almost one of three AFDC recipients belongs to this racial group (Table 2.4).

Similarly, one out of 10 adults nationwide, but two out of 10 welfare recipients, is Hispanic. Adults in other racial/ethnic groups, such as Native American, are slightly overrepresented in the welfare populations (3 to 4 percent) as compared with the adult population as a whole (approximately 1 percent). Asian/Pacific Islander adults are equally represented in the welfare populations and the overall population (2 percent).

Within each racial/ethnic group, how do the average literacy proficiencies of adults in the total population compare with those of welfare recipients (Figure 2.4)? This type of analysis reveals that the difference in average literacy scores between food stamps recipients and adults nationwide is smaller in the Hispanic population (15 points on the prose scale, for example) and Black population (10 points on this scale) than in the White population (29 points).

One can also compare the racial/ethnic differences in average literacy scores found in the general population with the differences found in the AFDC and food stamps populations (Table 2.5). These analyses show that the size of the performance gap between White and Black adults, and between White and Hispanic adults, is smaller within the welfare populations than within the national population. This seems to occur primarily because the performance gap between White welfare recipients and the total White population is larger than the performance gaps between Black and Hispanic welfare recipients and the Black and Hispanic populations as a whole.

More precisely, among White adults, the average literacy scores of the overall population (280 to 287 across the literacy scales) are quite a bit higher than those of

food stamps recipients (253 to 257) and AFDC recipients (264 to 268). Among Black and Hispanic adults, however, the overall population's average literacy scores (215 to 236) are similar to those of welfare recipients (200 to 230).

White welfare recipients had considerably higher average literacy scores than Black recipients, who in turn had higher average literacy scores than Hispanic recipients. The racial/ethnic differences in literacy skills are so large, in fact, that White adults on welfare performed better in the assessment, on average, than Black adults in the total population; similarly, Black welfare recipients performed better than Hispanic adults in the total population.

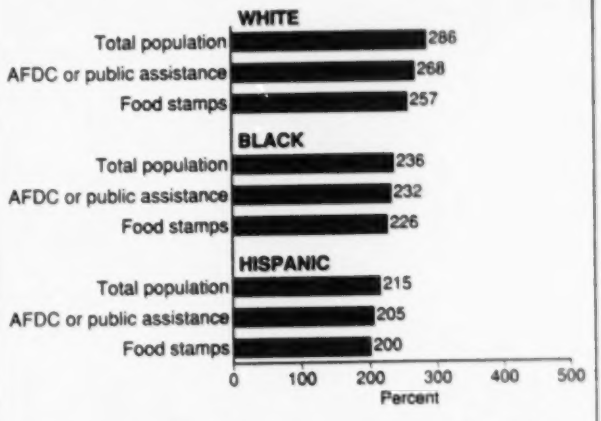
COUNTRY OF BIRTH

One might expect the welfare populations to contain relatively high percentages of foreign-born adults, but this does not appear to be the case. In the AFDC or public assistance population and in the food stamps population as in the total population, approximately 10 percent of adults reported that they were born outside the United States (Table 2.6). The remaining 90 percent were born in the United States or one of its territories.

Not surprisingly, country of birth appears to be a powerful predictor of English literacy skills. Adults who were born in the United States performed far better in the assessment than did adults who were born in other countries (Figure 2.5). In the welfare populations as well as in the general population, the average literacy scores of native-born adults were at least 60 points higher than those of Foreign-born adults. The differences were so large, in fact, that foreign-born welfare recipients outperformed foreign-born adults in the general population. Food stamps recipients who were born outside the United States had the lowest average literacy scores of all the groups examined.

These results can be better understood by examining the relatively large proportion of foreign-born adults in the general and welfare populations who performed in the lowest literacy level (Table 2.7). Foreign-born adults in the national population were roughly three times more likely than native-born adults to score in Level 1 on the prose scale, for example. Foreign-born AFDC or public assistance recipients were about two and a half times more likely than their native-born counterparts, and foreign-born food stamps

Figure 2.4
Average prose literacy proficiencies of adults in the total and welfare populations, by race/ethnicity



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 2.5
Difference in average prose literacy proficiencies between adults in the total and welfare populations, by race/ethnicity

Average proficiency of White adults minus average proficiency of Black adults	
Total population	50 points
AFDC or public assistance	36 points
Food stamps	31 points
Average proficiency of White adults minus average proficiency of Hispanic adults	
Total population	71 points
AFDC or public assistance	63 points
Food stamps	57 points

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

recipients were twice as likely as their native-born counterparts, to perform in this literacy level.

In interpreting these results, it is important to remember that this assessment focused only on literacy skills in the English language. Accordingly, the results cannot tell us anything about foreign-born individuals' literacy in other languages.

HEALTH STATUS

Food stamps recipients were more likely than AFDC or public assistance recipients, and more likely than adults in the total population, to report having a physical or mental health condition that keeps them from participating fully in work, school, housework, or other activities (Table 2.8). One out of every five food stamps recipients reported having a limiting health condition, compared with 14 percent of AFDC or public assistance recipients and 12 percent of adults in the general population.

Adults who reported having a limiting physical or mental condition tended to display far more limited literacy skills in the assessment than did adults without such conditions (Figure 2.6). In fact, their average literacy proficiencies tend to lie in either the Level 1 range or the low end of the Level 2 range. Across the three populations, the average prose scores of adults with a limiting physical or mental condition range from 208 among food stamps recipients to 227 for adults in the general population.

Accordingly, it is not surprising to find that adults with limiting health conditions were far more likely than those without such conditions to perform in the lowest literacy level (Table 2.9). On the prose scale, for example, nearly half the AFDC or public assistance recipients, an equivalent percentage of adults in the total population, and 57 percent of the food stamps recipients with limiting health conditions performed in Level 1. Efforts to provide remedial education to these individuals must confront their health needs and limitations as well as their low literacy levels.

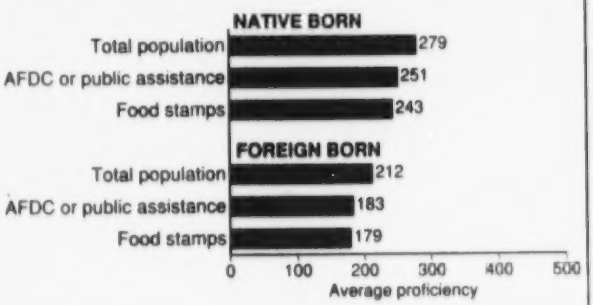
Adults in the general population who reported having physical or mental conditions tended to perform better

Table 2.6
Percentage of native- and foreign-born adults in the total and welfare populations

	Total population	AFDC or public assistance	Food stamps
Native born	90	88	88
Foreign born	10	12	12

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Figure 2.5
Average prose literacy proficiencies of adults in the total and welfare populations, by country of birth



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 2.7
Percentage of adults in the total and welfare populations who performed in Level 1 on the prose literacy scale, by country of birth

Native born	
Total population	17
AFDC or public assistance	29
Food stamps	34
Foreign born	
Total population	52
AFDC or public assistance	70
Food stamps	68

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

in the assessment than did welfare recipients with such conditions, but the performance gaps are not as large as those found among individuals who did not have limiting health conditions.

SUMMARY

- Two-thirds of the food stamps recipients and 71 percent of the AFDC or public assistance recipients were female.

- Female AFDC or public assistance recipients outperformed their male counterparts, as well as male and female food stamps recipients. Sex differences in average document and quantitative proficiency that are found in the general population are reduced or eliminated in the welfare populations.

- While the literacy skills of married and unmarried AFDC recipients were comparable, married food stamps recipients tended to display stronger quantitative skills than their unmarried counterparts. On all three literacy scales, unmarried food stamps recipients displayed weaker skills than any of the other groups examined.

- The AFDC program serves families with dependent children; thus it is not surprising to find that welfare recipients tend to be younger than adults in the population as a whole. For example, approximately one-third of the AFDC or public assistance recipients and slightly more than one-quarter of the food stamps recipients were age 24 or younger. On the other hand, just 5 percent of AFDC or public assistance recipients and 10 percent of food stamps recipients were age 65 and older.

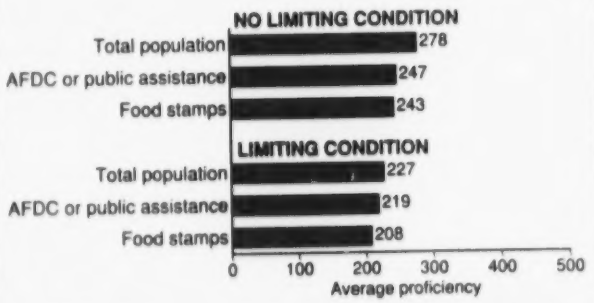
- In the general population, average prose and quantitative proficiencies rise from the youngest age group (age 16 to 18) to the 40 to 54 age group, then fall steadily across the older groups. The literacy skills of welfare recipients peak earlier, then decline across the middle and older age groups.

Table 2.8
Percentage of adults with and without limiting health conditions in the total and welfare populations

	Total population	AFDC or public assistance	Food stamps
No limiting condition	88	86	79
Limiting condition	12	14	21

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Figure 2.6
Average prose literacy proficiencies of adults in the total and welfare populations, by health status



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 2.9
Percentage of adults in the total and welfare populations who performed in Level 1 on the prose literacy scale, by health status

No limiting condition	
Total population	17
AFDC or public assistance	31
Food stamps	33
Limiting condition	
Total population	46
AFDC or public assistance	48
Food stamps	57

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

- White adults were underrepresented in the welfare populations, while Black and Hispanic adults were overrepresented. About half the AFDC or public assistance recipients and slightly less than half the food stamps recipients were White, however.

- The size of the performance gap between White and Black adults, and between White and Hispanic adults, is smaller within the welfare populations than within the national population. On average, however, White welfare recipients displayed stronger literacy skills than Black recipients, who displayed stronger literacy skills than Hispanic recipients. White welfare recipients performed better in the assessment, on average, than Black adults in the total population, and Black welfare recipients performed better than Hispanic adults in the total population.

- About 10 percent of the adults on welfare, and an equivalent percentage of adults in the total population, reported that they were born outside the United States.

- Not surprisingly, native-born adults displayed strong literacy skills in English, on average, than adults who were born in other countries.

- One out of every five food stamps recipients reported having a physical or mental health condition that keeps them from participating fully in work, school, housework, or other activities. Lower percentages of AFDC or public assistance recipients (14 percent) and adults in the general population (12 percent) reported such conditions.

- Adults with limiting physical or mental conditions were far more likely than those without such conditions to perform in the lowest literacy level in the survey. On the prose scale, for example, nearly half the AFDC or public assistance recipients and 57 percent of the food stamps recipients with limiting health conditions scored in Level 1.

PART III: EDUCATION AND LITERACY

Many adults on welfare have limited education, and education is a powerful predictor of literacy skills. As seen in this part of the report, adults who dropped out of school before receiving a high school diploma are disproportionately likely to have difficulty performing many types of everyday literacy tasks, and they are disproportionately likely to rely on the welfare system for support.

Accordingly, it is important to compare the educational experiences of welfare recipients with those of adults in the general population. The National Adult Literacy Survey results show that while a high percentage of recipients dropped out of school, many have since sought to further their education—and those who have done so display stronger literacy skills than those who have not.

HIGHEST LEVEL OF EDUCATION

Approximately half the food stamps recipients and a slightly smaller proportion of the AFDC or public assistance recipients (45 percent) reported having completed between zero and 12 years of schooling—that is, having left high school before graduating (Table 3.1). This is nearly twice the percentage of school dropouts nationwide (27 percent).

Welfare recipients were as likely as adults in the national population to indicate that their highest level of education was a high school diploma (27 percent), and they were twice as likely as adults in the general population to have ended their schooling upon completing a General Educational Development, or GED, certificate (7 to 8 percent, versus 4 percent, respectively). Yet, because so many AFDC and food stamps recipients left school before receiving a diploma, adults in these populations were far less likely than adults nationwide to have completed some postsecondary education (17 to 19 percent, compared with 42 percent).

In all three populations examined, adults with higher levels of education performed better in the literacy assessment, on average, than adults with less education (Figure 3.1). In the AFDC or public assistance population, for example, individuals who had completed some postsecondary education had a higher average prose score (287) than those whose highest level of education was a GED certificate or high school diploma (257 to 261), and the latter group, in turn, outperformed those who had left school before this point (212).

Table 3.1
Percentage of adults in the total and welfare populations with each level of education

	Total population	AFDC or public assistance	Food stamps
0 to 12 years of schooling	27	45	49
High school diploma	27	27	27
GED	4	8	7
Postsecondary	42	19	17

Source: Unpublished data from the *National Adult Literacy Survey, 1992*.

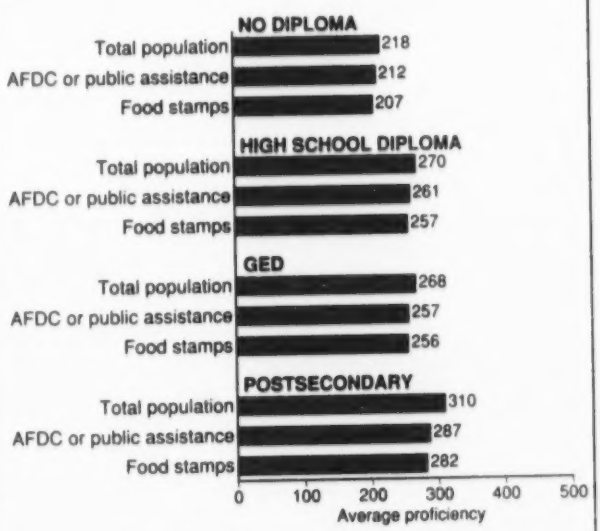
Similarly, the average prose literacy score of food stamps recipients with some postsecondary education (282) was considerably higher than that of recipients whose highest level of education was a high school diploma or GED (256 to 257). The lowest proficiencies, on average, were displayed by food stamps recipients who had not completed high school (207).

One might expect level of education to have an equalizing effect on the differences in literacy skills between the welfare and general populations, and this expectation is partly fulfilled. For example, adults in the total population outscored AFDC and public assistance recipients by 29 points and food stamps recipients by 36 points on the prose scale. When one compares individuals with the same level of education, these differences shrink, but they do not disappear. For example, among those whose highest level of education is a high school diploma, adults in the general population still outperformed food stamps recipients by 13 points on the prose scale. Further, when one compares the performance of individuals who had completed some postsecondary education, the average prose score of adults in the general population is 23 points higher than that of their counterparts in the AFDC or public assistance population.

These results suggest that factors other than level of education contribute to the performance disparities found between adults in the general population and adults on welfare. It may be that the type or nature of education received by most welfare recipients differs from that received by other individuals. Alternatively, it may be that experiences beyond school—for example, in the work place—are critical factors. As seen later in this report, welfare recipients are more likely than adults in the general population to be unemployed, and those who are employed are less likely to be working in high-level occupations.

Perhaps the most important aspect of these findings is that the literacy skills of welfare recipients who had graduated from high school or obtained a GED were so much stronger than those of welfare recipients who had not done so. As seen earlier in the report, nearly half the adults who had received AFDC, public assistance, or food stamps in the past year said they had not completed high school. It seems reasonable to expect that increasing the numbers of welfare recipients who finish high school or earn a GED certificate would raise the average literacy scores of the welfare population as a whole.

Figure 3.1
Average prose literacy proficiencies of adults in the total and welfare populations, by highest level of education



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

PURSUIT OF A GED OR HIGH SCHOOL EQUIVALENCY

As seen in the previous section, 7 to 8 percent of the adults who had received welfare support in the past year reported that a GED or high school equivalency was their highest level of education. Those who had left school before earning their diploma were asked whether they had ever studied for a GED or high school equivalency.

Between one-quarter and one-third of the welfare recipients said they had done so at some point in their lives. In fact, school dropouts in the welfare populations were almost twice as likely as dropouts in the general population to have

population to have studied for a GED or high school equivalency (Figure 3.2).

In the welfare populations, as in the general population, school dropouts who had never studied for a GED or high school equivalency had average prose scores in the Level 1 range (Table 3.2). The proficiencies of those who had studied for a GED were about 30 to 40 points higher, on average, falling in the range for Level 2.

Although the literacy skills of adults in the general population who had studied for a GED or high school equivalency appear to be stronger than those of welfare recipients who had done so, the differences are not statistically significant.

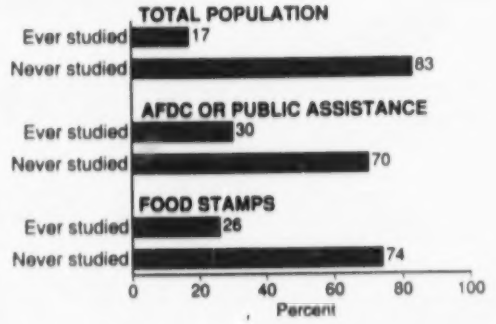
ENROLLMENT IN A BASIC SKILLS PROGRAM

When asked whether they were currently or had ever been enrolled in a program to improve their basic skills—that is, their reading, writing, and arithmetic skills—16 percent of the AFDC or public assistance recipients and 14 percent of the food stamps recipients responded that they had (Figure 3.3). In contrast, just 9 percent of adults nationwide had ever been enrolled in such a program. The higher level of enrollment among AFDC, public assistance, and food stamps recipients may be at least partly attributed to the fact that many programs for adults on welfare include education and job training components designed to improve recipients' skills.

On average, there were no significant differences in prose literacy between welfare recipients who had enrolled in a basic skills program and those who had not (Table 3.3). Such differences are found in the general population, however: individuals who had never enrolled outperformed those who had.

Because the National Adult Literacy Survey did not compare the literacy skills of matched groups of individuals who received basic skills training and those who did not, these results cannot tell us anything about the effectiveness of such training. This

Figure 3.2
Percentage of adults in the total and welfare populations who ever studied for a GED or high school equivalency



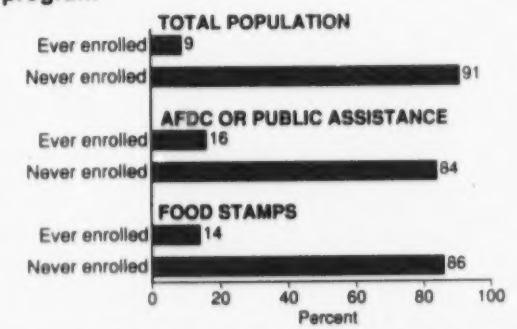
Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 3.2
Average prose literacy proficiencies of adults in the total and welfare populations, by ever studied for a GED or high school equivalency

Ever studied	
Total population	241
AFDC or public assistance	229
Food stamps	234
Never studied	
Total population	201
AFDC or public assistance	199
Food stamps	192

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Figure 3.3
Percentage of adults in the total and welfare populations who ever enrolled in a basic skills program



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

important information must be drawn instead from experimental research studies such as those described in Section V of this report.

ENROLLMENT IN SCHOOL OR COLLEGE

Eleven percent of adults nationwide reported that they were enrolled in school or college at the time of the survey (Table 3.4). Although the differences between the groups are small, AFDC or public assistance recipients (13 percent) were slightly more likely than food stamps recipients (10 percent) and adults in the general population (11 percent) to be enrolled in school or college at that time.

Welfare recipients who reported that they were enrolled in school or college at the time of the survey had higher average prose literacy proficiencies (263) than those who were not enrolled (233 to 240). Similarly, in the general population, school or college attendees outperformed non-attendees (Table 3.5). Still, welfare recipients who were enrolled in school or college did not perform as well as adults in the general population who were enrolled. Of course, the types of courses taken by welfare recipients are likely to be different from those generally taken by adults in the national population. Other factors may also influence the performance results observed.

A closer look at the findings reveals that the performance advantage held by students over nonstudents is somewhat smaller among AFDC or public assistance recipients than among adults in the population as a whole. More specifically, in the general population, individuals who reported being enrolled in school or college at the time of the survey outperformed those who were not enrolled by 34 points. In the AFDC or public assistance population, however, the difference between the two groups is only 23 points.

READING PRACTICES

The National Adult Literacy Survey asked participants several questions about their reading practices—for example, how many books they had read in the past six months, how many magazines they read on a regular

Table 3.3
Average prose literacy proficiencies of adults in the total and welfare populations, by enrollment in a basic skills program

Ever enrolled	
Total population	264
AFDC or public assistance	243
Food stamps	243
Never enrolled	
Total population	273
AFDC or public assistance	243
Food stamps	235

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 3.4
Percentage of adults in the total and welfare populations who were enrolled in school or college at the time of the survey

	Total population	AFDC or public assistance	Food stamps
Enrolled	11	13	10
Not enrolled	89	87	90

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 3.5
Average prose literacy proficiencies of adults in the total and welfare populations, by enrollment in school or college

Enrolled	
Total population	303
AFDC or public assistance	263
Food stamps	263
Not enrolled	
Total population	269
AFDC or public assistance	240
Food stamps	233

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

basis, how often they use a library, and how often they read a newspaper. Not surprisingly, the survey results show clear and strong relationships between reading practices and literacy skills: adults who read often are likely to have considerably stronger literacy proficiencies than those who read infrequently.* It is important to note the cyclical nature of this relationship: those who read often are likely to become better readers, and those who are better readers are likely to be more inclined to read often.

In this report, we focus on newspaper reading practices as a proxy for reading practices in general, since this type of reading is so prevalent in our society. An analysis of the frequency of newspaper reading shows that welfare recipients were less likely than those in the general population to report that they read a newspaper often (that is, every day or at least once a week). Nearly three-quarters (73 percent) of adults in the general population stated that they read a newspaper this often, in contrast to between 56 and 58 percent of adults on welfare (Table 3.6).

Conversely, AFDC, public assistance, and food stamps recipients were roughly twice as likely as adults in the general population to report that they never read a newspaper (11 to 12 percent, compared with 6 percent, respectively).

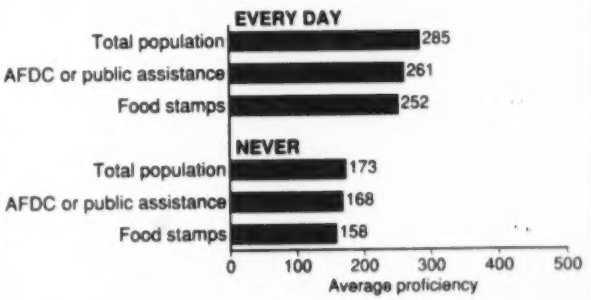
In the welfare populations, as in the total population, adults who read a newspaper every day had considerably higher literacy proficiencies, on average, than those who never read one (Figure 3.4). For example, the average prose score of AFDC or public assistance recipients who read a newspaper every day (262) is considerably higher than that of their counterparts who never do (173). A similar pattern is found among food stamps recipients. In fact, the difference in average scores between frequent newspaper readers and nonreaders is approximately 100 points in the welfare populations as well as in the general population. Thus, frequency of newspaper reading appears to be good predictor of individuals' literacy skills.

Table 3.6
Percentage of adults in the total and welfare populations who read a newspaper

	Total population	AFDC or public assistance	Food stamps
Every day	49	30	29
A few times a week	24	28	27
Once a week	14	20	21
Less than once a week	7	11	11
Never	6	11	12

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Figure 3.4
Average prose literacy proficiencies of adults in the total and welfare populations, by frequency of newspaper reading



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

*These findings are reported in Irwin S. Kirsch et al. (1994). *Adult Literacy in America.* Washington, D.C.: U.S. Department of Education.

SUMMARY

- Approximately half the food stamps recipients and 45 percent of the AFDC or public assistance recipients had not graduated from high school, nearly twice the percentage of school dropouts nationwide. Welfare recipients were about twice as likely as adults in the general population to have earned a GED, but they were far less likely to have completed any post-secondary education.

- Adults with higher levels of education performed better in the literacy assessment, on average, than did adults with less education. In particular, the literacy skills of welfare recipients who had graduated from high school or obtained a GED were much stronger than those of their counterparts who had not done so. Adults in the general population outperformed welfare recipients with comparable levels of education.

- In the welfare populations, as in the general population, school dropouts who had not studied for a GED or high school equivalency had average prose scores in the Level 1 range, while those who had done so scored in the Level 2 range.

- Sixteen percent of the AFDC or public assistance recipients and 14 percent of the food stamps recipients reported that they had enrolled in a program to improve their reading, writing, and arithmetic skills.

- Welfare recipients who had enrolled in basic skills programs performed as well in the assessment as those who had not, but the survey results cannot tell us how the skills of the two groups compared before the program interventions occurred.

- AFDC or public assistance recipients (13 percent) were slightly more likely than food stamps recipients (10 percent) and adults in the general population (11 percent) to have been enrolled in school or college at the time of the survey.

- Welfare recipients who were enrolled in school or college had higher average literacy proficiencies than those who were not. Still, these students in the welfare population did not perform as well as students in the general population.

- AFDC, public assistance, and food stamps recipients were less likely than those in the general population to read a newspaper every day or at least once a week (56 to 58 percent, compared with 73 percent), and they were twice as likely to say that they never read a newspaper (11 to 12 percent, compared with 6 percent).

- In the welfare populations, as in the total population, the average literacy proficiencies of adults who reportedly read a newspaper every day were considerably higher than those of adults who never read one.

PART IV: LABOR FORCE EXPERIENCE AND LITERACY

As part of the effort to reduce long-term reliance on welfare, policy makers have long sought to improve the employment potential of recipients. In recent years there has also been increasing concern about the problem of the working poor, or those who are employed but are unable to support themselves and their families without income support.

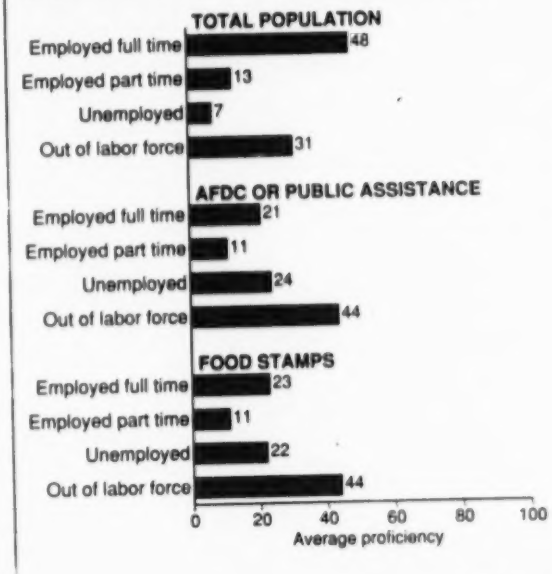
This chapter examines the literacy skills of welfare recipients who are employed and those who are not, and compares the proficiencies of those working in different occupations. As might be expected, there are strong associations between individuals' employment experience and their literacy skills. The survey results also reveal dramatic differences in wages and income among welfare recipients according to their levels of literacy.

LABOR FORCE STATUS

Roughly one out of every five AFDC or public assistance recipients and almost one out of every four food stamps recipients were working full time the week before the survey was conducted (Figure 4.1). Another 11 percent were working part time. Still, welfare recipients were less than half as likely as adults in the general population to be employed full-time, and they were more likely to be unemployed (22 to 24 percent) or out of the labor force (44 percent).*

Welfare recipients who were employed either full time or part time the week before the survey tended to perform better in the literacy assessment than those who were unemployed or not actively involved in the labor force (Figure 4.2). Among welfare recipients, the sharpest contrasts in performance are found between those who were in the labor force (that is, employed or unem-

Figure 4.1
Percentage of adults in the total and welfare populations in various labor force groups



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

*Readers should note the somewhat disparate time frames involved in these analyses: welfare status is based on whether or not the individual received support at any time during the 12 months before the survey, while employment status is based on circumstances that existed the week before the survey. Thus, the National Adult Literacy Survey data cannot tell us whether welfare recipients were working at the same time they were receiving AFDC or food stamps.

Figure 4.2
Average prose literacy proficiencies, by labor force status

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

ployed) and those who were not. Interestingly, this difference is much larger than the gap found between adults in the general population who were in the labor force and those who were not. In fact, adults nationwide who were out of the labor force performed considerably better in the assessment, on average, than welfare recipients in this labor force category.

Some adults are not in the labor force because they are retired, in school, or keeping house, while others have other reasons for not working or seeking work. Although it appears that the composition of the "out of the labor force" group differs somewhat between the general and welfare populations, the survey data do not permit us to know this with certainty. It may be that many welfare recipients who are not participating in the labor force are those whose literacy skills are quite limited and who are unable to find adequate employment, while adults in the general population who are out of the labor force include larger numbers of retirees with years of work experience and stronger literacy skills. Further, it is important to remember that many welfare recipients with young children may be restricted from participating in the labor force by a lack of access to child care assistance.

Unemployed welfare recipients demonstrated weaker literacy skills, on average, than unemployed adults in the general population. Further, welfare recipients who were employed full time displayed weaker skills than full-time workers in the total population. This is likely to reflect the literacy demands of the different occupations they enter. These findings are discussed later in this section.

NUMBER OF WEEKS WORKED

Employment circumstances can and do change over time, particularly for those at the margins of the labor market, as many welfare recipients are. To understand the relationship between welfare status and employment experience, then, it is important to have information about employment over time. All participants in the National Adult Literacy Survey, including those who were not working during the reference week (that is, the week before the survey), were asked to report how many weeks they had worked during the 12 months before the survey.

As might be expected, given the evidence of employment problems in the welfare population, adults whose families had received AFDC, public assistance, or food stamps in the past year tended to have worked less than adults in the general population (Table 4.1). Welfare recipients said they had worked only about 16 weeks (or four months), on average, in the year before the survey, while

Table 4.1
Average number of weeks worked in the year preceding the survey

Total population	30
AFDC or public assistance	16
Food stamps	16

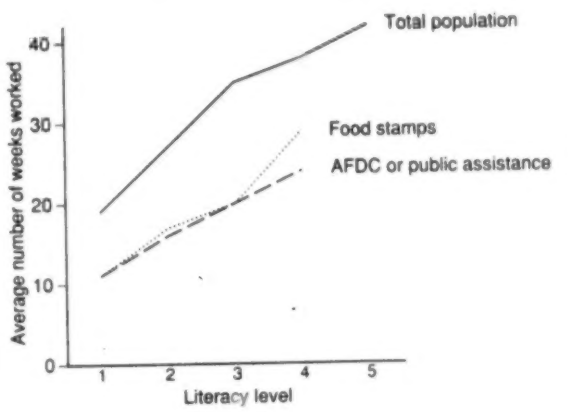
Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

adults nationwide had worked about 30 weeks —nearly twice as many.

Welfare recipients who performed in the higher literacy levels tended to have worked more weeks in the year before the survey than those in the lower levels (Figure 4.3). For example, food stamps recipients who scored in Level 1 on the prose scale had worked an average of just 11 weeks, or slightly less than three months, in the preceding year. In contrast, those who performed in Level 3 had worked about twice as many weeks, and those in Level 4 had worked almost three times as many weeks, on average. Similarly, AFDC or public assistance recipients who scored in the fourth level of prose literacy had worked more than twice as many weeks as those in the lowest level. Still, the average number of weeks worked by welfare recipients in Level 4 was relatively small—only 24 to 29 weeks in the preceding year—compared with the figures for the general population.

Adults in the general population had worked more weeks in the preceding year than welfare recipients who performed in the same literacy level. For example, adults nationwide who performed in Level 1 on the prose scale had worked an average of 19 weeks, compared with 11 weeks for welfare recipients in this literacy level. Adults nationwide who performed in Level 2 had worked 27 weeks, on average, compared with 16 to 17 weeks for welfare recipients in this level. A similar pattern is found at the other end of the performance spectrum.

Figure 4.3
Average number of weeks worked in the year preceding the survey, by prose literacy level



Level	1	2	3	4	5
Total population	19	27	35	38	44
AFDC or public assistance	11	16	20	24	*
Food stamps	11	17	20	29	*

* Insufficient number of respondents to provide an accurate estimate.

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

OCCUPATION

A large percentage of welfare recipients reported that their current or most recent job was in a craft or service occupation (43 to 44 percent). Smaller percentages reported working in sales or clerical positions (23 to 24 percent) or in labor or assembly jobs (25 to 27 percent). In fact, welfare recipients were more likely than adults in the general population to report that their current or most recent work was in the crafts or services, or in labor or assembly jobs. They were far less likely to have worked in professional or managerial occupations (Table 4.2).

Table 4.2
Percentage of adults in various occupational categories

	Total population	AFDC or public assistance	Food stamps
Professional, managerial	24	8	6
Sales, clerical	28	24	23
Craft, service	29	43	44
Labor, assembly	19	25	27

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Adults on welfare who reported that their current or most recent occupation was professional or managerial outperformed those in sales or clerical occupations, who in turn outperformed those in craft or service occupations, who in turn outperformed those in labor or assembly jobs (Figure 4.4).

The average literacy proficiencies of welfare recipients were lower than those of adults in the general population who were employed in the same types of occupations, however. For example, the average prose scores of welfare recipients employed as laborers or assemblers (231 to 239) were lower than those of adults in the total population who were employed in such occupations (249). Similarly, the average prose scores of welfare recipients employed in craft or service occupations (252 and 249, respectively) were slightly lower than those of craft or service workers in the general population (264). The reasons for these performance disparities are not evident from the survey data. Each occupational group covers a broad spectrum of jobs, however, and it is plausible that welfare recipients are concentrated in jobs with lower literacy demands and lower pay.

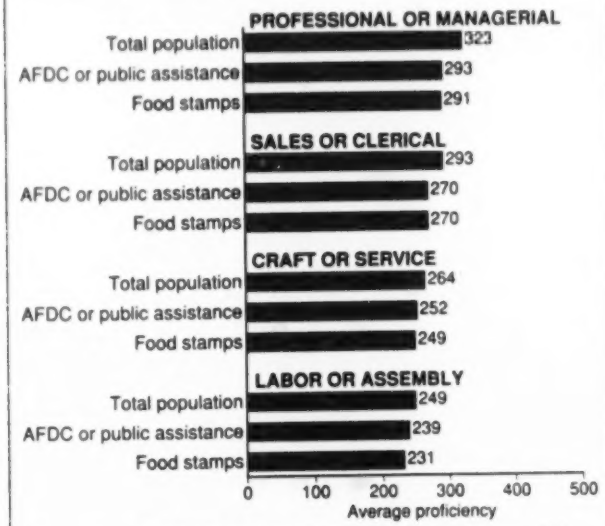
Another perspective on the assessment results can be obtained by comparing the average literacy proficiencies of welfare recipients with those of adults in the general population who work in various occupations (Figure 4.5). Analyses show that, on average, adults working in labor or assembly occupations performed slightly better in the literacy assessment (by 6 points on the prose scale) than AFDC or public assistance recipients, and quite a bit better (by 13 points) than food stamps recipients.

In viewing these results, however, it is important to remember that within each population there is a range of performance. Not all welfare recipients had lower prose literacy scores than laborers and assemblers in the general population. On average, however, that is the case.

WEEKLY WAGES

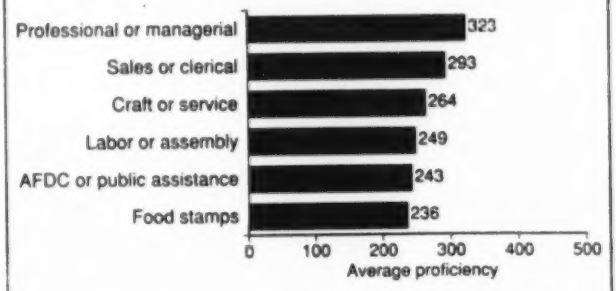
Individuals who were employed full time or part time or were on leave from their jobs the week before the survey were asked to report their total weekly wage or salary, before deductions, for that week. The average weekly wages reported by employees whose families had received welfare support in the preceding 12 months were far lower than those of adults in the general population

Figure 4.4
Average prose literacy proficiencies, by current or most recent occupation



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Figure 4.5
Average prose literacy proficiencies of adults in the welfare populations compared with those in the total population in various occupations



Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

(Table 4.3). The median weekly wage of employed AFDC or public assistance recipients was $184 and that of employed food stamps recipients was $180, while that of workers nationwide was $333—almost two times higher.

Welfare recipients who performed in Level 3 or 4 reported higher weekly wages for the week before the survey, on average, than did those who performed in Level 1 or 2 (Figure 4.6). In the food stamps population, for example, individuals who scored in the third or fourth level on the prose scale had average weekly wages of approximately $200, while those in the two lowest levels earned only about $170 to $180. In the AFDC or public assistance population, adults who performed in Level 3 or 4 outearned their less literate counterparts by as much as $60 per week, on average.

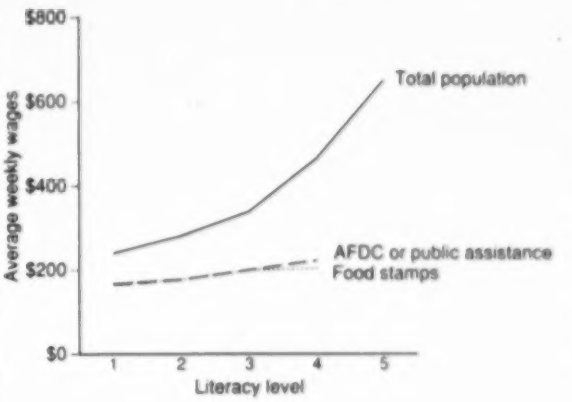
Again the survey data reveal differences between welfare recipients and adults in the general population who performed in the same literacy level. Welfare recipients who scored in Level 1 on the prose scale reported lower weekly earnings, on average, than did adults in the total population who performed in this level. The wage differences between the welfare populations and the general population are so large, in fact, that welfare recipients who performed in the fourth level of prose literacy earned less, on average, than adults in the general population who performed in the lowest level.

ANNUAL HOUSEHOLD INCOME

To gather additional information about their economic status, survey respondents were asked to indicate their family's total 1991 income from all sources. The disparities in annual household income between welfare recipients and adults in the general population are even larger than the disparities in weekly wages. AFDC, public assistance, and food stamps recipients had a median annual household income of roughly $10,000 the year before the survey, or less than $900 per month. In contrast, the median annual family income of adults in the general population was nearly $31,000, or about $2,600 per month (Table 4.4).

Across the literacy levels, substantial income disparities are found between welfare recipients and adults in the general population who performed in the same literacy level (Figure 4.7). This pattern even holds true in the lowest literacy level. Adults in the general population who scored in Level 1 on the prose scale had an average

Figure 4.6
Average weekly wages, by prose literacy level



Level	1	2	3	4	5
Total population	$240	$281	$339	$465	$650
AFDC or public assistance	$165	$177	$200	$223	*
Food stamps	$168	$178	$200	$204	*

* Insufficient number of respondents to provide an accurate estimate.

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 4.3
Average weekly wages

Total population	$333
AFDC or public assistance	$184
Food stamps	$180

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

Table 4.4
Average annual household income

Total population	$30,824
AFDC or public assistance	$10,138
Food stamps	$9,732

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

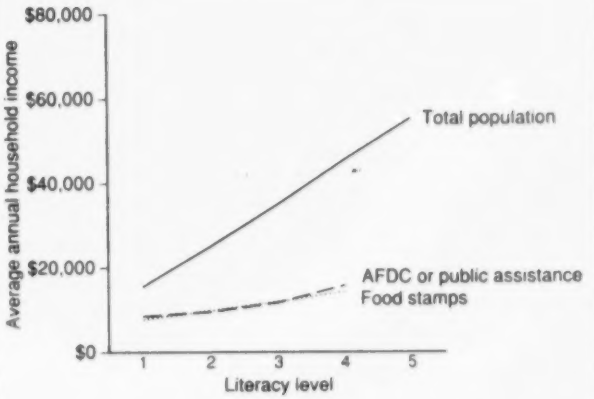
annual household income of $15,480, which is roughly twice that of AFDC or public assistance recipients ($8,520) and food stamps recipients ($7,740) who scored in this level.

In the general population, those with higher literacy proficiencies clearly enjoy a substantial economic advantage over those with lower proficiencies. The average annual household income of adults in each level is approximately $10,000 higher than that of adults in the preceding level. As a result, individuals who performed in Level 5 had annual incomes that were more than three times higher than those of adults in Level 1.

Welfare recipients with higher literacy proficiencies also have higher incomes than those with low proficiencies. Among AFDC or public assistance recipients, for example, average annual household income almost doubles between Level 1 and Level 4—an increase of about $7,000. This rate of increase is smaller than that found in the general population, however. Thus, higher literacy levels appear to have a smaller payoff in the welfare populations than in the general population.

The average annual household income of welfare recipients who performed in Level 4 ($14,000 to $16,000) was roughly equivalent to that of adults in the general population who performed in the lowest literacy level ($15,000).

Figure 4.7
Average annual household income, by prose literacy level



Level	1	2	3	4	5
Total population:	$15,480	25,010	35,020	45,610	55,400
AFDC or public assistance:	$8,520	9,540	11,710	15,820	*
Food stamps:	$7,740	9,860	11,990	14,360	*

* Insufficient number of respondents to provide an accurate estimate.

Source: Unpublished data from the *National Adult Literacy Survey, 1992.*

SUMMARY

- Adults on welfare were less than half as likely as adults in the general population to have been employed full time the week before the survey (21 to 23 percent, compared with 48 percent, respectively). Further, they were far more likely to have been unemployed (22 to 24 percent) or out of the labor force (44 percent).

- Welfare recipients who were active in the labor force performed better in the assessment, on average, than those who were not. On average, the literacy skills of AFDC, public assistance, and food stamps recipients who were out of the labor force were more limited than those of their counterparts in the general population.

- AFDC, public assistance, and food stamps recipients said they had worked only about 16 weeks

(or four months) during the year before the survey, on average, while adults nationwide had worked an average of about 30 weeks.

- In the welfare populations, as in the general population, adults with higher levels of literacy proficiency tended to have worked more weeks in the year before the survey than those with lower levels of proficiency. For example, food stamps recipients in Level 1 on the prose scale had worked an average of just 11 weeks in the preceding year, compared with 29 weeks for those in Level 4. Still, the average number of weeks worked by welfare recipients in the upper levels was considerably lower than that of their counterparts in the general population

- Welfare recipients were less likely than adults in the general population to report that their current or most recent occupation was professional or managerial and more likely to report that it was in the crafts or services, or in labor or assembly.

- Just as in the general population, welfare recipients whose current or most recent occupation was professional or managerial outperformed welfare recipients in sales or clerical occupations, who in turn outperformed recipients in craft or service occupations, who in turn outperformed recipients in labor or assembly jobs. The average literacy proficiencies of adults on welfare were lower than those of adults in the general population who were employed in the same occupations.

- The median weekly wage of employed AFDC or public assistance recipients was $184 and that of employed food stamps recipients was $180, while that of workers nationwide was $333—almost two times higher.

- Welfare recipients who performed in Level 3 or 4 reported higher weekly wages for the week before the survey, on average, than did those in Level 1 or 2. However, even welfare recipients who performed in Level 4 earned less than adults in the general population who performed in Level 1.

- Welfare recipients had a median annual household income of roughly $10,000 the year before the survey, or less than $900 per month. In contrast, the median income of adults in the general population was nearly $31,000, or about $2,600 per month.

- As in the general population, welfare recipients with higher literacy proficiencies have a substantial economic advantage over those with lower proficiencies. Between Level 1 and Level 4, the average annual household income of AFDC or public assistance recipients almost doubles, for example. This rate of increase is smaller than that found in the general population, however. Thus, higher literacy levels appear to have a smaller payoff in the welfare populations than in the general population.

PART V: RAISING LITERACY LEVELS

This report paints a clear picture of the low literacy levels found among many adults on welfare. It leaves little doubt that literacy and dependency are intertwined: Welfare recipients with the lowest levels of literacy are the least likely to be employed, and even when they are employed they tend to earn lower wages and work fewer weeks in the year than those with higher literacy levels.

Literacy is the product of a lifetime, however. Many activities and conditions nurture it, as shown in this report and in other research reports issued by the National Center for Education Statistics and Educational Testing Service. The primary question is, can effective education and literacy training programs be created that will significantly raise the levels of literacy among welfare recipients? Furthermore, would these gains translate into increased employment opportunities, higher earnings, and reduced dependency?

Serious efforts to "reform" welfare in one way or another have been under way since the legislation that created the Work Incentive Program was enacted in the 1960s. Periodic attempts have been made to reduce the welfare rolls through work incentives, work requirements, and various kinds of training programs. Some programs have included basic education, but this has not been pursued seriously as a way to reduce the welfare rolls until recently, with the enactment of the JOBS program in 1988.

In this section of the report, we examine several literacy and education programs for welfare recipients and explore whether these programs have demonstrated success in strengthening recipients' literacy skills, raising incomes, and reducing dependency.* While numerous education and literacy programs for adults on welfare have been created in the past few decades, only a few have been subjected to rigorous evaluation and follow-up, employing control groups. These are the efforts described here.

BASIC EDUCATION

In 1985 California created the Greater Avenues for Independence (GAIN) program. This statewide program is the first attempt at providing education for welfare recipients on a large scale. It required basic education for all welfare recipients whose skills appeared to be deficient enough to prevent their training or employment. The national JOBS program, enacted in 1988 under the Family Support Act, used GAIN as a model.

The GAIN program was evaluated by the Manpower Demonstration Research Corporation from March 1988 to June 1990, using control groups created through random assignment.** Sixty-five percent of AFDC recipients were designated as needing basic education, and 58 percent of these individuals were referred to basic education in the five counties included in the evaluation. The program options were:

*Many of these programs use tools in addition to education, however, and the separate contribution made by education is often not identifiable.

**See Karin Martinson and Daniel Friedlander. (1994, January). *GAIN: Basic Education in a Welfare-to-Work Program*. Manpower Demonstration Research Corporation; and James Riccio et al. (1994, September). *GAIN: Benefits, Costs, and Three-Year Impacts*. Manpower Demonstration Research Corporation.

programs were evaluated. To measure their literacy skills, both the experimental and control groups were given the Tests of Applied Literacy Skills, developed by Educational Testing Service.

The evaluation found that it was indeed feasible to provide basic education on a large scale. The program also succeeded in increasing the number of GED recipients in all five counties. The literacy test results were not encouraging, however. In four of the five counties, the test scores of welfare recipients who participated in education programs did not increase relative to those of the control groups. When the results were summed for all five counties, there were no gains in literacy scores.

San Diego was the only county to experience a large and statistically significant increase in literacy scores. This was also the only county to create its own basic education program specifically to serve the GAIN population. All the other counties enrolled clients in regular adult basic education programs. San Diego believed that the regular programs would not be appropriate for the welfare population, and it used extra funds to tailor a curriculum to fit the needs of that population. Compared with the education programs in the other counties, attendance in the San Diego program was better monitored and hours of instruction were longer.

The evaluators caution that the results should not be overinterpreted due to various limitations of the study. For example, the instruction provided may not have reflected what is measured in the literacy test, since the curriculum was not designed with that particular test in mind. As such evaluations go, however, the study is sound, and such Manpower Demonstration Research Corporation studies are the best ever undertaken of social programs in this country.

What is learned from this example? We must look closely at the education programs in the four counties in which no literacy gains were found. We also need to closely examine the successful experience in San Diego, where a customized education program for welfare recipients produced positive results. It is also important to see whether, in programs that have a positive impact on literacy, there are also payoffs in increased earnings. In these counties, participants had no earnings gains (on average) through the second year of follow-up. In the third year, income gains were found, but these do not follow expected patterns. The large gains in literacy scores in San Diego did not translate into income gains. In Riverside county, on the other hand, there were considerable income gains despite the lack of significant gains in literacy scores.

The results of the GAIN program are encouraging in some respects and confounding in others. They point to areas in need of additional inquiry and program development.

SCHOOL ATTENDANCE, BY STICKS AND CARROTS

Ohio's Learning, Earning, and Parenting Program (LEAP) uses both financial incentives and penalties to promote school attendance by pregnant and parenting teenagers on welfare. While these individuals represent only a small proportion of the welfare population, they are the group most likely to become long-term welfare recipients.

In this program, pregnant women and custodial parents (mostly women) under age 20 who are receiving AFDC must attend school if they do not have a high school diploma or a GED. If they attend, they get a $62 monthly bonus as well as child care and transportation assistance. If they do not attend, the monthly check is reduced by $62, so that those who comply with the requirement receive $124 per month more than those who do not.

The Manpower Demonstration Research Corporation has been evaluating LEAP in 12 counties using an experimental research design in which nearly 10,000 teenage parents were randomly assigned either to a program

*See David Long, et al. (1994, October). *LEAP: Effects of LEAP and Enhanced Services in Cleveland.* Manpower Demonstration Research Corporation.

group or to a control group. The groups are being followed over time.*

In the first year, the program improved school retention, substantially reducing the drop out rate. It also resulted in a significant number of out-of-school parents enrolling in a school or GED preparation program. Based on limited early data, however, the increased retention and enrollment appear to have had only small effects on high school and GED completion rates. A program in Cleveland offers additional services to mothers enrolled in school, and these enhancements seem to increase school completion rates more than the LEAP program alone.

According to program evaluators, "LEAP has been shown to be a workable and relatively inexpensive program that significantly improves the school performance of teen parents on welfare." Yet they also conclude that with or without the program, few teenage parents in Cleveland finish high school or receive a GED. It remains to be seen whether the schooling gains that occur under the program translate into improved employment, increased income, and reduced welfare payments over time.

TEACHING IN CONTEXT

When literacy or basic education is insufficient to enter skill training or obtain a job, the traditional approach has been to provide basic education in classrooms. Then, after spending a certain amount of time there, or upon reaching some desired level of competence based on examinations, a person may be considered ready for skill training or for seeking a job with the expectation that an employer will provide the training.

Another approach is to integrate literacy instruction and job training, providing literacy skills each step of the way as needed to perform the training. In this way, all instruction is made relevant to the process of learning to do a job successfully. Thomas Sticht, a leader in developing this training approach for the armed forces, calls this "functional context training." The Work in America Institute, a major policy center for literacy studies, calls it "job-linked literacy." The institute has published an extensive collection of case studies of such practices within industry, which are typically applied to persons who have already been hired but who have insufficient literacy skills.*

In regular classroom approaches it typically takes 12 years for the average young person to attain a 12th grade reading level. As a practical matter, an employer cannot help someone with limited reading skills to attain this level of proficiency, and those who need these skills are not likely to be willing to devote long periods of time to acquire the education they need, particularly when they need a paying job and the possibility of getting one after literacy training is an unknown factor.

One program that integrates literacy instruction and job training, the army's Functional Literacy (FLIT) program, grew out of a concern in the early 1970s about the shrinking pool of educated recruits. The Army was worried that it would be pressed to take in greater numbers of people who were less prepared educationally for its training, and it created a new program to address the need.

In evaluations, the FLIT program produced three times the amount of gain as did the conventional program. Those who participated in the program also retained 80 percent of the literacy skills they were taught, compared with 40 percent in the traditional program.

The Center for Employment Training provides an example of how job-linked literacy instruction can be used in the civilian economy.** The center works with youth from disadvantaged backgrounds, many of whom are on welfare. Its approach has many important features beyond literacy instruction, such as an outreach and recruitment system, a unique approach to screening and placement, support services and child care, job placement, and follow-up counseling and assistance after job placement.

*See Work in America Institute. (1991). *Job-Linked Literacy: Innovative Strategies at Work, Part 1, Vestibule Training: Basic Skills for New Hire.*

**Efforts to integrate academic and vocational instruction are also evident in programs established under the Perkins Act and in the Southern Regional Education Board's 20-state "High Schools That Work" consortium project.

Of greatest relevance here, however, is its approach to literacy training. The Center does not use tests to determine the literacy levels of new recruits. Instead, it observes what students can do during a one-week trial in one of its training programs. This week is a tryout period for the student, as well, and he or she can decide to change programs. The program is open-ended so that students can enter at any time and remain as long as they need to. Those who have basic skills deficiencies require an additional three to six weeks on average, and the total training period averages about six months.

As described by Sticht, the program "use(s) a functional context approach in which training closely simulates the job setting, basic skills education is integrated with job skills training, and progress and completion is based on competent task performance, not simply completion of a certain number of hours of training."

This program has been evaluated many times over the years, and recently Alan B. Krueger summarized the results of these evaluations.* "The one short-term classroom training program for youth which has been reliably evaluated and found to produce large and statistically significant earnings gains is the Center for Employment and Training (CET) project in San Jose," he reports. "CET produced average annual earnings gains of over $3,000 for youth enrollees during the third and fourth year after graduation. . . . [Further, it] produces significant earnings gains averaging $1,500 annually for minority single parents."

In general, Krueger concludes, short-term classroom training, by itself, "usually has not been a successful strategy for youth." The approach used by the Center for Employment Training—providing literacy training as part of job training—is a bright spot in an otherwise bleak array of programmatic approaches.

OTHER EFFORTS

Over the years many programs have sought to address the literacy and education needs of welfare recipients and disadvantaged populations generally. We have described several intensive efforts designed to assist individuals who need such interventions in order to find work or enter training programs. We have analyzed programs that were subjected to carefully designed evaluation studies, in which the results for groups who received the program intervention were compared with control groups who did not. (It should be noted, however, that many would have received related or similar services elsewhere—a fact that confounds even the best experimental research studies.)

Beyond these efforts, several other programs and studies should be mentioned.**

- *The Teenage Parent Demonstration.* This comprehensive program, which operated at three sites from late 1987 through mid-1991, paralleled requirements for custodial teenage parents in the Federal Family Support Act of 1988. It provided adult education to those identified as needing it. Participation in school increased 12 percentage points as a result of the intervention, from 19 percent to 29 percent.

- *New Chance.* This program was designed to promote self-sufficiency among young welfare mothers and improve the well-being of their children. Although individuals in the experimental group spent nearly twice as much time in the education programs as did those in the control group, no gains in reading skills were found.

*Alan B. Krueger. *What's Working (And What's Not).*

**These excerpts are from a summary of evaluation studies issued by the National Governor's Association, which provides considerable detail about these studies and the original sources. See Evelyn Ganzglass. (1994.) *Research Findings on the Effectiveness of State Welfare-to-Work Programs.* National Governor's Association.

- *The JOBS program.* The Rockefeller Institute of Government of the State University of New York is conducting a three-year study of the implementation of this federal program in 10 states. This will be the most comprehensive assessment of progress under the 1988 Federal reform law that created the JOBS program.

SUMMARY

We have not attempted to present an exhaustive picture of the use of education to reduce dependency, and we make no effort to draw firm conclusions about what is possible and what is effective from this research. Still, from the examples and evidence presented here, we can make a number of observations.

- Education and training can play a positive role in raising the literacy levels of welfare recipients, but this outcome is not easy to achieve.
- There is considerable promise in the integration of literacy instruction and training, as seen in the Army's functional literacy program and the Center for Employment Training program.
- Opportunities and requirements to participate in basic education programs can result in large enrollments of welfare recipients in such programs.
- Literacy and education programs sometimes increase the measured literacy proficiencies of welfare recipients, compared with those of recipients in control groups.
- Some types of programs succeed in increasing the numbers of welfare recipients who earn GED certificates.
- Among welfare recipients who participate in education or literacy training, higher literacy proficiencies may not lead to higher earnings.
- The quality of the educational programs provided to welfare recipients is likely to vary considerably, particularly depending on whether the programs are tailored to meet recipients' needs.
- Education is typically only one element in a package of programs and services needed by welfare recipients.
- Assigning welfare recipients to existing adult basic education programs appears to have little measurable effect on raising their literacy proficiencies.
- Raising the incomes of welfare recipients is likely to require job development and placement, child care, and other services in addition to education and literacy training. It is difficult to identify the separate impacts of these various program components.*

*Determining this would require complex and expensive research using "planned variations" to separate out the particular program factors responsible for outcomes.

IN CONCLUSION

The detailed findings of this inquiry into the literacy skills of the welfare population are summarized at the beginning of this report and at the end of each chapter. They will not be repeated here.

What do we take away from this in-depth look at the literacy proficiencies of AFDC, public assistance, and food stamps recipients? In our view, the principal messages of this report are as follows.

- *Low literacy proficiencies are widespread in the welfare population.* About three of every four AFDC, public assistance, and food stamps recipients performed in the two lowest levels of literacy defined in the National Adult Literacy Survey. In its 1994 report, the National Education Goals Panel stated that "improving the skills of those in the two lowest levels is the most urgent . . . because the relationship between poverty and low levels of literacy is so strong."

- *Levels of literacy and degrees of success in the labor market are clearly and closely linked.* This is true in the general population, and it is true among those on welfare: adults with higher levels of literacy are likely to work more weeks during the year and, when working, are likely to earn higher weekly wages. Even more importantly, as levels of literacy increase, the percentage of adults on welfare declines.

  Literacy is a currency in the labor market. The less a population has of that currency, the greater the likelihood that it will be spending hard currency from the government treasury to remedy the problem.

- *Welfare dependency can be reduced through literacy interventions in two ways: by increasing literacy levels in the general population to reduce the risk of falling into dependency, and by raising the literacy levels of those already on welfare to help them become more financially self-sufficient.* Literacy plays a large role in the risk of becoming dependent as well as in the capacity to regain independence. First, we must improve our early childhood and public education systems and strengthen family and community support for learning. Further, we must raise the literacy skills of the many welfare recipients who have limited proficiencies by providing them with intensive, tailored programs. At the same time, we must recognize that factors other than literacy are involved in becoming dependent—and in becoming independent. We have not addressed these factors in this report.

- *Not just any literacy or education program will succeed in raising welfare recipients' literacy skills or improving their employment or economic prospects.* This is clear from the experimental research summarized earlier in this report. We must look at successful and unsuccessful practices and approaches to find the best paths to higher levels of

literacy. Further, we must identify ancillary programs and services that are critical to the success of literacy and education programs and to subsequent success in the job market.

- *Aside from the quality of literacy and education programs, there is the matter of quantity.* The 1988 Job Opportunities and Basic Skills (JOBS) program is a positive step, but implementation lags far behind demand, and programs are very unevenly distributed among the states. In 1993, Wyoming had less than 30 AFDC recipients enrolled in basic education programs, while California had 22,000. Nationwide, 124,000 welfare recipients were enrolled in programs that year.

The future of efforts to raise the basic education of welfare recipients remains uncertain. As we write this report, a new welfare reform bill that would end the JOBS program as a federal entity is moving through the Congress, with discretion given to the states on how to spend block grants. Still, the program remains in place in most states, and governors and state legislatures can continue to build on its promising beginnings, whatever the outcome of current legislative efforts.

Clearly we have far to go to reach our goal of helping all welfare recipients to strengthen their literacy skills, find new or better jobs, and become financially self-sufficient. We hope that this report will help guide those who are pursuing these crucial objectives.

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